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OF ILLINOIS

DEPARTMENT OF REGISTRATION AND EDUCATION

William G. Stratton, Governor

Vera M. Binks, Director

1960

# PETROLEUM INDUSTRY IN ILLINOIS, 1959

Part I. Oil and Gas Developments

Part II. Waterflood Operations

Alfred H. Bell  
Richard F. Mast  
Margaret O. Oros  
Carl W. Sherman  
Jacob Van Den Berg

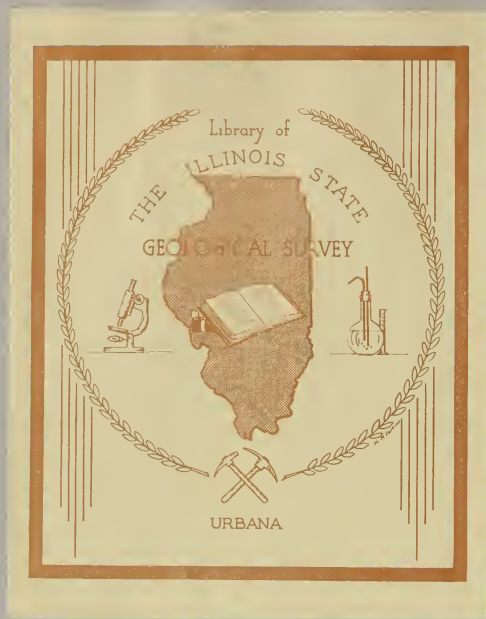
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BULLETIN 88

ILLINOIS STATE GEOLOGICAL SURVEY

JOHN C. FRYE, *Chief*

URBANA, ILLINOIS



ILLINOIS STATE GEOLOGICAL SURVEY



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**ILLINOIS STATE GEOLOGICAL SURVEY BULLETIN 88**  
**Urbana, Illinois**

**1960**

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# PETROLEUM INDUSTRY IN ILLINOIS, 1959

ALFRED H. BELL, RICHARD F. MAST, MARGARET O. OROS,  
CARL W. SHERMAN, AND JACOB VAN DEN BERG

## ABSTRACT

Illinois produced 76,727,000 barrels of oil in 1959, a decrease of 5 percent from the 1958 production. Fifty-seven percent of the production (43,790,000 barrels) was estimated to have resulted from secondary recovery by waterflooding in 1959, an increase from the 53 percent of the total production reported in 1958.

Forty-eight percent of the 2,032 new holes drilled were completed as producing wells. Twelve oil pools, two gas pools, 43 extensions to pools, and 31 new pay zones in existing pools were discovered. One of them, the Harrodsburg Limestone, had not been previously recognized as a pay zone in Illinois.

Twelve pools had extensive development during 1959, including 1 oil pool discovered during the year. Two of the 1959 oil discoveries opened a new oil producing area in western Illinois.

During 1959 a total of 499 controlled secondary recovery projects were reported in Illinois. The oil produced from these projects amounted to approximately 41,360,000 barrels, and an additional 2,430,000 barrels of oil was estimated to have been produced by dump flooding. At the end of 1959 the total cumulative waterflood oil produced in Illinois was 250,031,000 barrels.

Pressure maintenance projects added 1,110,000 barrels of oil to the state's production but this was not considered as secondary oil.

Reserves are estimated at 596.1 million barrels as of January 1, 1960, 28.7 million barrels less than the estimate for January 1, 1959.

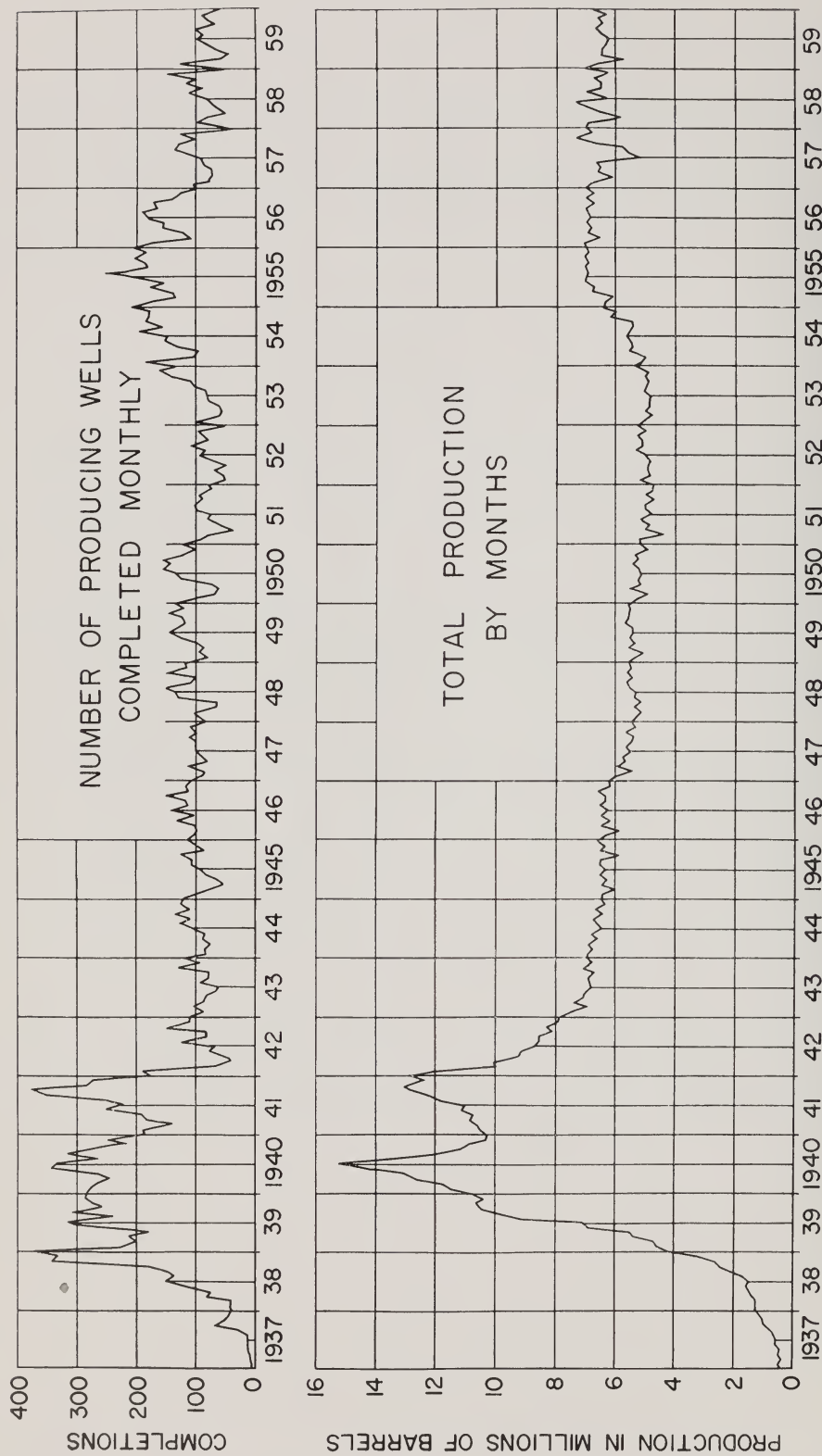


Fig. 1.—Oil production in Illinois, 1937-1959.

# PART I

## OIL AND GAS DEVELOPMENTS

ALFRED H. BELL, JACOB VAN DEN BERG, AND MARGARET O. OROS

### INTRODUCTION

This report summarizes oil and gas developments in Illinois during 1959. It includes statistics on drilling and on primary and secondary production, and provides information on economics, pool development, exploratory drilling, discoveries, geologic occurrence of oil and gas, total productive acreage, estimated petroleum reserves, and underground gas storage projects. A map (pl. 1) on a scale of one-eighth inch to the mile shows oil and gas pools and waterflood projects in the state.

Areas with significant discoveries or drilling programs are discussed.

Many oil companies and individuals contributed basic data for this report. Several members of the Illinois State Geological Survey staff assisted in preparation of the report, including Lester L. Whiting, Wayne F. Meents, D. H. Swann, Ronald A. Younker, Richard H. Howard, and James A. Bredar.

Part II, which deals with waterflood operations, was prepared by the Petroleum Engineering Section of the Survey. Tables and maps are based on data furnished by the oil operators through the Illinois Secondary Recovery and Pressure Maintenance Study Committee of the Interstate Oil Compact Commission.

### PRODUCTION AND ECONOMICS

Illinois in 1959 produced 76,727,000 barrels of oil<sup>1</sup>, a decline of five percent from the 80,779,000 barrels produced in 1958, but still somewhat above the average annual production, which for the decade 1950 through 1959 was 70,591,000 barrels of oil. Illinois continued to rank eighth among the oil-producing states, with 3.1 percent of the total United States production.

The continued expansion of secondary recovery operations has held production firm in spite of a decrease in drilling activity and lack of significant new oil pool discoveries.

The annual oil production in Illinois, 1937 through 1959, is shown in figure 1. Well completions and production from 1936 through 1959 are given in table 1. Detailed production figures for 1959 are listed by pools in table 10. Data are given for each field on year of discovery, proved area, production during 1959, cumulative production, numbers of wells, character and thickness of producing formation, and depth to deepest zone tested. Table 11 gives similar information for gas fields.

Daily average production by months during 1959 was as follows:

<i>Month</i>	<i>Barrels</i>	<i>Month</i>	<i>Barrels</i>
January . . .	206,323	July . . .	206,968
February . . .	201,069	August . . .	213,097
March . . .	208,677	September . . .	213,200
April . . .	213,833	October . . .	212,323
May . . .	204,032	November . . .	210,300
June . . .	209,567	December . . .	215,968

Crude oil in Illinois sold for \$3.00 a barrel throughout 1959, and the total value, at the wells, of Illinois crude oil was about \$230,181,000 at year's end. The value of natural gasoline and liquefied petroleum gas extracted from Illinois natural gas was estimated at \$1,500,000, making the total value of oil, gas, natural gasoline, and liquefied petroleum gas for the year \$231,681,000. Table 2 gives production by counties for 1959.

### DRILLING AND DEVELOPMENT

A total of 2,032 wells was drilled for oil and gas in Illinois in 1959 (tables 1 and

<sup>1</sup> Illinois production figures from Illinois Basin Oil Scouts Association monthly reports, which are based on pipeline runs.

TABLE 1.—ILLINOIS COMPLETIONS AND PRODUCTION SINCE JANUARY 1, 1936

Period of time	Number completions <sup>a</sup>	Number of producing wells	Production (M bbls) <sup>b</sup>		
			New fields <sup>c</sup>	Old fields <sup>c, d</sup>	Total
1936 . . . . .	93	52			4,445
1937 . . . . .	449	292	2,884	4,542	7,426
1938 . . . . .	2,536	2,010	19,771	4,304	24,075
1939 . . . . .	3,617	2,970	90,908	4,004	94,912
1940 . . . . .	3,755	3,080	142,969	4,678	147,647
1941 . . . . .	3,807	2,925	128,993	5,145	134,138
1942 . . . . .	2,017	1,179	101,837	4,753	106,590
1943 . . . . .	1,791	1,090 (20) <sup>e</sup>	77,581	4,675	82,256
1944 . . . . .	1,991	1,229 (12)	72,946	4,467	77,413
1945 . . . . .	1,763	1,094 (15)	70,839	4,371	75,210
1946 . . . . .	2,362	1,387 (17)	70,174	5,123	75,297
1947 . . . . .	2,046	1,102 (22)	61,455	5,004	66,459
1948 . . . . .	2,489	1,316 (21)	59,623	5,185	64,808
1949 . . . . .	2,741	1,447 (32)	58,571	5,930	64,501
1950 . . . . .	2,894	1,328 (23)	55,794	6,234	62,028
1951 . . . . .	2,383	947 (23)	54,147	6,097	60,244
1952 . . . . .	2,077	854 (35)	53,727	6,344	60,071
1953 . . . . .	2,161	1,161 (88)	51,924	7,101	59,025
1954 . . . . .	3,254	1,896 (107)	59,130	7,810	66,940
1955 . . . . .	3,885	2,164 (62)	72,016	9,115	81,131
1956 . . . . .	3,640	1,742 (85)	71,645	10,669	82,314
1957 . . . . .	2,585	1,114 (46)	66,751	9,898	76,649
1958 . . . . .	2,291	1,066 (36)	69,532	11,247	80,779
1959					
January . . . . .	248	135 (7) <sup>e</sup>	5,440	956	6,396
February . . . . .	119	60 (1)	4,944	887	5,831
March . . . . .	87	47 (4)	5,468	1,001	6,469
April . . . . .	155	73 (6)	5,401	1,014	6,415
May . . . . .	174	94 (7)	5,304	1,021	6,325
June . . . . .	178	100 (4)	5,242	1,045	6,287
July . . . . .	176	91 (1)	5,363	1,053	6,416
August . . . . .	221	108 (4)	5,504	1,102	6,606
September . . . . .	171	73 (5)	5,313	1,083	6,396
October . . . . .	170	84 (3)	5,460	1,122	6,582
November . . . . .	213	101 (8)	5,223	1,086	6,309
December . . . . .	120	68 (3)	5,534	1,161	6,695
Total . . . . .	2,032	1,034 (53)	64,196	12,531	76,727

<sup>a</sup> Includes only oil and gas producers and dry holes; no service wells.  
<sup>b</sup> Production figures based on Illinois Basin Scout Association's Pipe Line Production Report.  
<sup>c</sup> New fields are those discovered since Jan. 1, 1937; old fields are those discovered prior to that date.  
<sup>d</sup> Includes Devonian production at Sandoval and Bartelso.  
<sup>e</sup> Figures in parentheses refer to number of producing wells included in totals which previously had been completed as dry holes.

2) <sup>2</sup>, a decrease of 11 per cent from the 2,291 wells drilled in 1958. The wells completed in 1959 included 963 oil wells, 18 gas wells, 564 dry holes in pools, and 487 unsuccessful wildcats. Many of the gas wells are shut in. An additional 53 former dry holes were reworked and completed as producing wells, and 27 former producing wells were reworked and are now producing from the same or different pay zones.

<sup>2</sup> Well completion figures are based on reports received from the Illinois Basin Oil Scouts Association. An undetermined number of additional wells was completed, for the most part in water-flood areas.

Forty-eight percent of the 1959 completions were successful, compared with the 1958 success ratio of 45 percent. The average success ratio for the period 1950-1959 is 47 percent. The percentage of total wildcat completions for 1959 was 26 percent, a decrease of two percentage points from that of 1958.

There were three pool consolidations during the year. Hunt City and Schnell South pools were combined with the Clay City Consolidated pool. Trumbull West, which had been abandoned, was revived

and combined with Trumbull to form Trumbull Consolidated pool.

Two other abandoned pools, Calhoun Central and Hornsby South, were revived by drilling (table 10), but one of these, Calhoun Central, had its one new well plugged before the end of the year.

Eleven pools were abandoned during 1959 (table 10)—Calhoun Central, Centerville Northeast, Decatur, Ellery South, Exchange North, Melrose South, Noble West, Posen North, Posen South, Raymond South, and Roland West. Raymond South was one of the pools discovered during 1959.

#### EXPLORATORY DRILLING

Wildcat wells were drilled in all of the 57 counties where drilling was done in 1959 (table 2). Twelve oil pools and two gas pools were discovered in 12 counties: two each in Clay and Williamson, and one each in Adams, Brown, Crawford, Fayette, Gallatin, Hamilton, Lawrence, Macoupin, Montgomery, and Richland. A small gas well, the E. E. Rue, Koenig-Preston-Wegener Comm. 1, sec. 10, T. 4 S., R. 7 W., Randolph County, has not been assigned a pool name and is not included in the above list.

Twenty-six percent, or 535 of the wells drilled in 1959, were wildcats. Eight of the 212 that were drilled more than two miles from production discovered new pools, a success ratio of about 3.8 percent (table 3). The 323 wildcats drilled between half a mile and two miles from production discovered three new pools and 37 extensions to pools, making the near wildcat tests 12.4 percent successful. Three additional new pools and six extensions were discovered by working over wells previously completed as dry holes.

The discovery wells of the 12 new oil pools and two new gas pools are listed in table 4. The 43 wells that extended the areas of existing pools are listed in table 5, and the 28 wells that discovered 31 new pays are listed in table 6. At the end of the year the new gas pools, Richwood in Crawford County and Sumner South in Lawrence County, each had one capped gas well.

The 12 new oil pools had 43 oil wells. West Seminary pool in Clay County had 25 of these, Kellerville pool in Adams County had four, and Siloam pool in Brown County had three. The nine other new pools had a total of 11 oil wells at the end of the year.

Distribution of the new pools is shown on figure 2. The two gas pools are in the old producing area of southeastern Illinois in Crawford and Lawrence Counties. Three of the new oil pools are on the southern margin and two on the western margin of the main producing area of the state. The two oil pools in Adams and Brown Counties, the first found there, are about 80 miles northwest of the main producing area and about 25 miles south of the nearest oil production in Colmar-Plymouth pool, but are only a short distance north of the Beverly and Fishhook gas pools (pl. 1). The five remaining new pools are in the main producing area, near the deep part of the basin.

Three new pools are producing from Pennsylvanian sandstones. These include Plainview South in Macoupin County, Raymond South in Montgomery County, and Richwood (gas) in Crawford County.

Eight of the new pools are in Mississippian sandstones and a limestone ranging in age from Cypress through Harrodsburg. Included in this group are Ab Lake South in Gallatin County, Belle Prairie West in Hamilton County, Johnston City East and Marion East in Williamson County, Passport North in Richland County, Pixley and West Seminary in Clay County, and Sumner South (gas) in Lawrence County. Twenty-five of the 31 new pays are in the Mississippian.

One new pool, Wilberton in Fayette County, produces from sandstone in the Lingle Formation of Devonian age.

Two new pools, Kellerville in Adams County and Siloam in Brown County, produce from the Edgewood Dolomite of Silurian age.

A generalized geologic column for the southern Illinois oil region indicating principal producing strata is shown in figure 3.



McLean . . .	1	0	0	0	0	1	0	0	0	2,012	—
Macon . . .	7	3	0	1	0	3	28	0	0	15,412	48
Macoupin . .	70	8	0	29	23	10	118	0	0	40,427	17
Madison . . .	11	0	0	0	3	8	0	0	0	12,600	325
Marion . . .	75	28	5	23	16	3	1,201	9.285	0	126,175	7,545
Mason . . .	2	0	0	0	0	2	0	0	0	2,567	—
Menard . . .	2	0	0	0	0	2	0	0	0	3,075	—
Montgomery .	14	3	1	1	4	5	16	0.650	0	16,880	3
Morgan . . .	—	—	—	—	—	—	—	—	—	—	0†
Moultrie . . .	9	0	0	0	0	9	0	0	0	23,408	3
Perry . . .	10	0	0	1	3	6	0	0	0	14,540	43
Piatt . . .	4	0	0	0	0	4	0	0	0	7,946	—
Pike . . .	9	0	2	1	4	2	0	2.030	0	5,982	0*
Randolph . .	16	3	1	0	7	5	265	0.200	0	27,218	173
Richland . . .	41	18	0	18	5	0	1,093	0	0	130,108	2,191
St. Clair . . .	13	0	0	0	5	8	0	0	0	8,626	8
Saline . . .	36	13	0	15	8	0	750	0	0	103,842	899
Sangamon . .	19	2	0	10	1	6	23	0	0	32,427	24
Schuyler . . .	2	0	0	0	0	2	0	0	0	1,699	—
Shelby . . .	14	4	0	2	2	6	132	0	0	26,900	68
Vermilion . .	2	0	0	0	0	2	0	0	0	3,449	—
Wabash . . .	76	43	0	26	7	0	2,267	0	0	179,404	2,493
Warren . . .	1	0	0	0	0	1	0	0	0	755	—
Washington .	40	8	0	12	12	8	348	0	0	63,980	780
Wayne . . .	143	73	0	52	16	2	4,579	0	0	232,427	6,778
White . . .	149	85	0	49	14	1	21,697	0	0	453,984	8,266
Will . . .	1	0	0	0	0	1	0	0	0	140	—
Williamson . .	7	2	0	2	2	1	145	0	0	19,232	28
Total	2,032	963	18	564	283	204	80,889	14.639	2,230,549	4,458,906	76,727

<sup>a</sup> Does not include input wells, salt-water disposal wells, or old wells worked over.

<sup>b</sup> Wells drilled between one-half and two miles from production.

<sup>c</sup> Wells drilled more than two miles from production.

<sup>d</sup> Production is combined for Clark and Cumberland Counties.

<sup>e</sup> Production is combined for Hancock and McDonough Counties.

<sup>f</sup> All wells abandoned or temporarily shut down.

<sup>g</sup> Gas only.

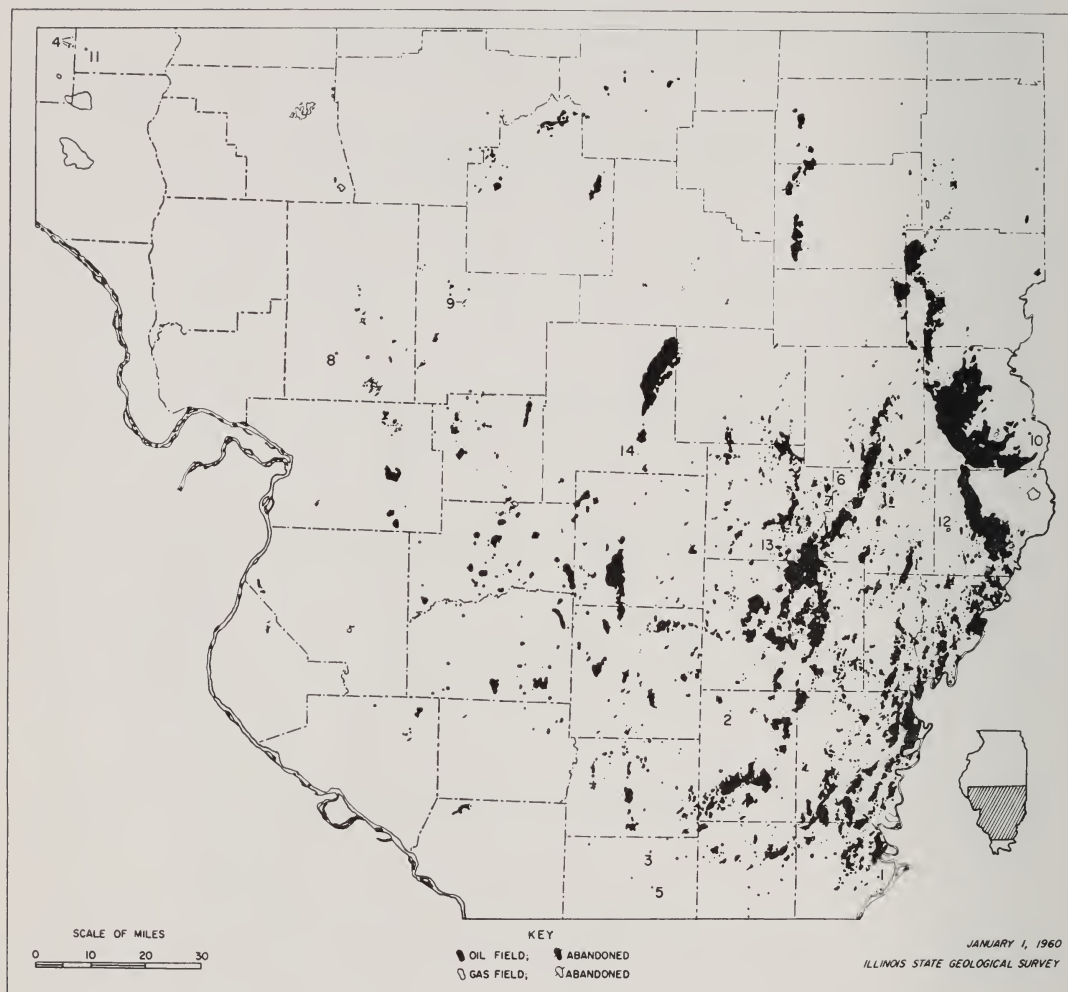


Fig. 2.—Oil pools discovered in Illinois, 1959.

- |                      |                   |                       |
|----------------------|-------------------|-----------------------|
| 1—Ab Lake South      | 6—Passport North  | 11—Siloam             |
| 2—Belle Prairie West | 7—Pixley          | 12—Sumner South (gas) |
| 3—Johnston City East | 8—Plainview South | 13—West Seminary      |
| 4—Kellerville        | 9—Raymond South   | 14—Wilberton          |
| 5—Marion East        | 10—Richwood (gas) |                       |

TABLE 3.—WILDCAT WELLS DRILLED IN 1959

Category	Total	Producers	Percentage successful
Wildcat near <sup>a</sup> . . .	323	40 <sup>c</sup>	12.4
Wildcat far <sup>b</sup> . . .	212	8	3.8
Total . . .	535	48 <sup>d</sup>	9.0

- <sup>a</sup> From one-half to two miles from production.  
<sup>b</sup> More than two miles from production.  
<sup>c</sup> Three of the wildcat-near producers were new-pool discovery wells.  
<sup>d</sup> Six of the extension wells listed in table 5 and three of the pool discovery wells listed in table 4 were originally completed as dry holes and later worked over.

The discovery of Siloam pool in Brown County in November, following by only a few months the discovery of Kellerville pool about two and a half miles to the west in Adams County, has stimulated much interest and drilling activity in this heretofore nonproductive area. The discovery well of the Siloam pool, the Charles Eager, W. L. Davis 1, sec. 8, T. 2 S., R. 4 W., was completed at a total depth of 635 feet for an initial production of 530 barrels of oil a day from Edgewood Dolomite of Silurian age. Three oil wells, with a total initial production of 860 barrels a day, had been completed in the pool by the end of the year. Kellerville pool had four oil wells with combined initial production of 230 barrels a day, also from Edgewood Dolomite. In addition to the seven producing wells, 37 dry holes were drilled in Adams and Brown Counties. Several unsuccessful tests were also drilled in adjoining counties.

The largest of the 1959 pool discoveries, West Seminary in Clay County, had 25 oil wells at the end of the year. The discovery well, the Shulman Brothers, R. Barnett 1, sec. 6, T. 2 N., R. 7 E., was drilled to a total depth of 3,110 feet and plugged back to 2,995 feet for an initial production of 112 barrels of oil and 30 barrels of water from the Aux Vases Sandstone. Subsequent wells in the pool also discovered oil in the Rosiclare and McClosky zones of the Ste. Genevieve. Initial productions ranged from four to 468 barrels of oil a day, with 15 of the 25 wells making more than 100 barrels a day initially.

None of the other discoveries appears to be significant.

A selected list of unsuccessful deep tests in pools and in wildcat areas is given in table 7. Many of these wells, although not deep in actual footage, are stratigraphically deep. This list does not include several deep tests made for gas storage companies.

Geophysical exploration declined in 1959 (table 8). Seismograph activity was down from 1958, and all gravity meter and magnetometer work was in connection with underground gas storage projects.

Many pools have been incorporated in other pools by consolidation. These are listed in table 9 with the year of consolidation and present pool designation.

As in past years, oil and gas statistics have been revised to include changes resulting from 1959 drilling and production (tables 10 and 11). Pools are listed alphabetically with locations. Names of pay zones, their depth and thickness, character of oil, pool structures, primary and secondary oil production, and gas production figures are given. Cumulative production totals are also included. Proved acreage and numbers of well completions and abandonments are listed.

Year of abandonment and total cumulative production and drilling data are carried for abandoned pools.

#### POOL DEVELOPMENT

Wells were drilled for oil or gas in 57 of the 102 counties of Illinois in 1959. In 18 of them there was only wildcat drilling but 39 had pool development drilling (table 2). Christian County with 181 ranked first in total number of completions for the second consecutive year, and was followed by White, Lawrence, Wayne, and Clay Counties, each of which had more than 100 completions. These five counties accounted for 38 percent of all wells completed.

Pool development wells were widely scattered, but most were in the southeastern part of the state. Following is a list of the pools that had more than 20 producing wells completed in 1959 (old wells reworked are not included):

TABLE 4.—DISCOVERY WELLS OF NEW POOLS, 1959

Line no.	Pool	County	Company and farm	Location	Total depth (ft)	Producing formation	Depth to top (ft)	Initial production <sup>a</sup> (bbls)	Date of completion	No. wells producing in pool 12/31/59
1	Ab Lake S.	Gallatin	V.S. & S. Drlg. Co., Austin "B" 1	3-9S-10E	2975; PB 2830	Aux Vases	2798	22; 10	8-12	1
2	Belle Prairie W.	Hamilton	Calvert Drlg., Inc., Rawls 1	1-4S-5E	4389; PB 4348	Harrodsburg	4206	24; 70	5-5	1
3	Johnston City E	Williamson	Mutual O. & G., Madison "E" 1	15-8S-3E	2317	Cypress	2284	105	9-30	2
4	Kellerville	Adams	Ray F. Starr, W. Doole "A" 1	11-2S-5W	675; PB 655	Silurian	638	3	9-30	4
5	Marion E.	Williamson	Pyramid Oil Co., Robertson Comm. 1	15-9S-3E	2642; PB 2315	Bethel	2295	8	3-31	1
6	Passport N.	Richland	A. C. Davis, J. Weber 1	30-5N-9E	3080; PB 2963	Aux Vases	2928	128; 35	7-1	1
7	Pixley	Clay	Ray Hendricks, Wells 1	26-4N-8E	3121; PB 2725	Cypress	2680	37; 60	3-10	2
8	Plainview S.	Macoupin	J. Waitukaitus, Simmermaker 1	22-8N-8W	453	Pennsylvanian	443	4	8-12	1
9	Raymond S.	Montgomery	Clyde Bassett, Turner 1	33-10N-4W	625; PB 620	Pennsylvanian	603	4	6-16	1 <sup>b</sup>
10	Richwood (Gas)	Crawford	Richland Oil Corp., S. Richey 1	24-6N-11W	621	Pennsylvanian	612	1,500,000 cfb	12-22	1 <sup>c</sup>
11	Siloam	Brown	C. Eager, W. L. Davis 1	8-2S-4W	635	Silurian	616	530	11-18	3
12	Sumner S (Gas)	Lawrence	J. J. Oslager, Shick 1	16-3N-13W	2791; PB 2618	Aux Vases	2566	1,140,000 cfb	12-16	1 <sup>c</sup>
13	West Seminary	Clay	Shulman Bros., R. Barnett 1	6-2N-7E	3110; PB 2995	Aux Vases	2972	112; 30	6-9	25
14	Wilberton	Fayette	Kewanee Oil Co., Gehle 1	13-5N-2E	4528; PB 3505	Lingle	3466	58; 55	7-8	1

<sup>a</sup> Oil; water.<sup>b</sup> Abandoned 9-23-59.<sup>c</sup> Shut in.

TABLE 5.—DISCOVERY WELLS OF EXTENSIONS TO POOLS IN 1959  
C = Consolidated

Line no.	Pool	County	Company and farm	Location	Total depth (ft)	Producing formation	Depth to top (ft)	Initial production <sup>a</sup> (bbls)	Date of completion
1	Ashmore S	Coles	E. Zink, C. Miller 1	7-12N-11E	391	Pennsylvanian	377	400,000 cfb	8-12 <sup>b</sup>
2	Barnhill	Wayne	Gentles Drig. Co., Knodell 1	23-2S-8E	3411; PB 3400	McClosky	3364	11; 30	9-16
3	Calhoun Central	Richland	Reliance Oil Corp., V. Snively 1	3-2N-10E	3312; PB 3262	Rosiclare	3241	30; 60	3-17
4	Clay City C	Wayne	P. Fulk, L. Riggs "A" 1	34-2N-8E	3072; PB 3002	Aux Vases	2974	10; 35	6-16
5	Clay City C	Clay	Natl. Assoc. Pet. Co., B. Misenheimer 1	26-3N-7E	3130; PB 3038	Bethel; Ohara	2883; 3013	37; 70	11-4
6	Clay City C	Richland	P. Fulk, Lemke 1	36-3N-9E	3157; PB 3120	Rosiclare	3100	20; 30	6-9
7	Clay City C	Jasper	M. L. Van Fossan, C. Schafer et al. 1	29-6N-10E	2897	Rosiclare; McClosky	2826; 2887	220	7-1
8	Coil N	Wayne	T. R. Lindsay, N. Keen 1	31-1N-5E	2880; PB 2820	Aux Vases	2790	153	10-21
9	Dale C	Hamilton	Calvin Oil Co., R. Pickens 1	29-6S-7E	3266; PB 3223	Aux Vases	3102	33; 10	11-4
10	Ellery E	Edwards	Natl. Assoc. Pet. Co., P. Hallam 1	26-2S-10E	3350; PB 3260	Rosiclare	3224	24	5-26
11	Harristown	Macon	D. P. Knierim, O. R. Gulick 1	1-16N-1E	2026	Silurian	1997	8	3-10
12	Hord	Clay	V. S. & S. Drig. Co., R. Van Dyke 1	3-5N-6E	2713	Aux Vases	2702	101; 2	9-23
13	Hornsby S	Macoupin	C. Bassett, W. H. Hartke, Jr. 1	10-8N-6W	631; PB 625	Pennsylvanian	605	35	5-12
14	Ina	Jefferson	R. Powers, Jefferson Oil & Gas 1	22-4S-2E	3257; PB 3240	Salem	3189	6; 24	6-2
15	Iola C	Effingham	E. M. Self, Maud B. Danks 1	28-6N-5E	2401; PB 2306	Bethel	2302	6; 25	8-12
16	Iola C	Effingham	D. F. Herley, T. Sapp 1	33-6N-5E	2317	Bethel	2310	60	5-19
17	Kellerville	Adams	C. A. Beckman, Pierce 1	36-1S-5W	670; PB 658	Silurian	650	10; 80	11-4
18	Kellerville	Adams	Ray F. Starr, Mildred Milliron 1	12-2S-5W	635	Silurian	628	216	12-2
19	Kincaid C	Christian	J. Simpkins, Mulvaney-Mitchell 1	11-13N-3W	1840	Hibbard	1823	110	2-17
20	LaClede	Fayette	Hawk Oil Prod., C. R. Salzman 2	15-5N-4E	2276	Bethel	2273	5	7-22
21	Main C	Crawford	Bar Be Oil Corp., Sydnor 1	8-6N-12W	1596	McClosky	1573	12	11-4
22	Mason N	Effingham	Dale Hopkins, Althoff 2	10-6N-5E	2552; PB 2513	McClosky	2510	55	1-20
23	Mt. Auburn C	Christian	Pat Gentile, Williams 1	4-14N-2W	1931	Silurian	1919	30	1-20
24	Mt. Auburn C	Christian	Schaefer Oil Co., R. Carl 1	5-14N-2W	1921	Silurian	1905	36; 54	4-28
25	Mt. Auburn C	Christian	Consolidated Oil Prod. Co., W. H. & C. W. Ostermeier 1	5-14N-2W	1904	Silurian	1899	28; 117	3-3

TABLE 5.—(Continued)

Line no.	Pool	County	Company and farm	Location	Total depth (ft)	Producing formation	Depth to top (ft)	Initial production <sup>a</sup> (bbls)	Date of completion
26	Mt. Auburn C	. . . Christian	Schaefer Oil Co., Padgett 1	7-14N-2W	1906	Silurian	1891	185; 20	6-16
27	Mt. Auburn C	. . . Christian	James D. Jordan, R. Butcher 1	21-15N-1W	1937	Silurian	1916	18; 22	4-28
28	Mt. Auburn C	. . . Christian	James D. Jordan, O. H. Parrish 1	28-15N-1W	1958	Silurian	1930	40; 300	9-30
29	Mt. Auburn C	. . . Christian	C. B. Mansfield, A. Fleshman 1	29-15N-1W	1930	Silurian	1920	190; 2	10-21
30	New City . . .	. . . Sangamon	Atkins & Hale, Mary Carswell 1	17-14N-4W	1838; PB 1770	Silurian	1721	60; 22	5-5
31	New Memphis N.	. . . Clinton	W. C. Neerman, F. Goebel 1	28-1N-5W	2138; PB 2100	Devonian	2034	2; 10	6-9
32	Patoka . . .	. . . Marion	Beeson Oil Co., M. Malan 1	19-4N-1E	1445	Bethel	1433	60	8-12
33	Patoka S . . .	. . . Marion	R. H. Troop, Nattier-Langenfeld Comm. 1	5-3N-1E	1475	Bethel	1475	120	1-13
34	Raleigh S . . .	. . . Saline	E. E. Rue, G. Oglesby 1	27-8S-6E	2970; PB 2110	Waltersburg	2046	300	7-15
35	Roland C . . .	. . . White	Athene Dev. Co., Childers 1	28-5S-9E	2869	Cypress	2857	32; 9	4-14
36	Sailor Springs C	. . . Clay	Murvin Oil Co., I. Brooks 1	30-3N-7E	3065; PB 3045	McClosky	3036	3; 12	11-11
37	Sailor Springs C	. . . Clay	Francis M. Pierce, E. Stanley 1	1-4N-7E	2915; PB 2910	McClosky	2911	198	12-16
38	Sailor Springs C	. . . Clay	Kingwood Oil Co., H. Erwin 1	3-4N-7E	2589	Cypress	2573	58; 32	2-17
39	Sailor Springs C	. . . Clay	Whaley Oil Corp., O. C. Hardin 1	33-5N-7E	2936; PB 2814	Aux Vases	2775	46; 80	2-17
40	Schnell S . . .	. . . Clay	Ridgedale Oil & Gas, J. F. Coulter 1	13-2N-8E	3039	Rosiclare	3034	45	5-5
41	Trumbull C . . .	. . . White	H. N. Sanders, Simmons 1	25-5S-8E	2823	Cypress	2812	37; 16	8-12
42	Waggoner . . .	. . . Montgomery	James D. Jordan, Brubaker 1	30-11N-5W	696; PB 525	Pennsylvanian	523	650,000 cfg	12-2 <sup>b</sup>
43	Whittington W . . .	. . . Franklin	John Bowers, Plains Pipe Line 1	12-5S-2E	2864; PB 2735	Renault	2722	223	6-9

<sup>a</sup> Oil; water.<sup>b</sup> Shut in.

TABLE 6.—DISCOVERY WELLS OF NEW PAYS IN POOLS, 1959  
C = Consolidated

Line no.	Pool	County	Company and farm	Location	Total depth (ft)	Producing formation	Depth to top (ft)	Initial production <sup>a</sup> (bbbls)	Date of completion
1	Aden C	Wayne	H. H. Weinert, Morlan "B" 5	33-2S-7E	4148	Harrodsburg	4132	138	6-9
2	Aden C	Wayne	Texaco Inc., H. Silverman 16	16-3S-7E	5379; PB 5338	Dutch Creek	5318	207	12-9
3	Benton	Franklin	Shell Oil Co., Lager "C" 1	35-6S-2E	2996; PB 2925	Aux Vases; Ohara	2752; 2804	200	8-5
4	Bungay C	Hamilton	E. P. DuPont, Jr., S. L. Moore 1-B	10-4S-7E	4290; PB 4200	Harrodsburg	4190	14; 100 <sup>b</sup>	12-22
5	Friendsville N	Wabash	S. G. Walker, D. Price et al. Comm. 1	12-1N-13W	2325	Bethel	2308	35	7-1
6	Harco	Saline	Canter Drilg. Co., Heflin 2	10-8S-5E	2626	Cypress	2618	18; 6	7-8
7	Hidalgo N	Cumberland	Elizabeth K. Lewis, C. Alten et al. 1	36-9N-9E	2699	McClosky	2676	15	1-27
8	Hord	Clay	V. S. & S. Drilg. Co., R. Van Dyke 1	3-5N-6E	2713	Aux Vases	2702	101; 2	9-23
9	Hord N	Effingham	Farrar Drilg. Co., Cora Webster 4	34-6N-6E	2800	Aux Vases	2633	150; 70	7-1
10	Kenner	Clay	Texaco Inc., H. D. Allen "A" 7	36-3N-5E	4624; PB 4542	Carper; Devonian	4222; 4424	41; 15	7-29
11	Kincaid C	Christian	J. Simpkins, Peabody "A" 1	14-13N-3W	1895; PB 1881	Silurian	1874	32; 4	10-7
12	Lancaster	Wabash	H. L. Garrett, Selbert 2-A	4-1N-13W	2050	Tar Springs	2043	10	8-12
13	Maunie S	White	K. R. Sutton, C. Spillman 1	26-6S-10E	1660; PB 1659	Biehl	1649	8; 1	1-20
14	Mill Shoals	White	Nation Oil Co., W. P. McIntosh 2	31-3S-8E	4191; PB 4189	Harrodsburg	4166	57; 110	11-4
15	New Harmony C	Edwards	George Wickham, Rotramel et al. 1	26-2S-14W	3526; PB 3409	Salem	3364	40; 16 <sup>b</sup>	12-2
16	New Haven C	White	J. S. Carter, W. L. Wasem 6	24-7S-10E	2909; PB 2850	Ohara	2794	165	11-18
17	Omaha	Gallatin	R. S. Thompson, Flanders "C" 1	3-8S-8E	2920; PB 2785	Cypress	2402	15	2-17
18	Patoka S	Marion	R. H. Troop, Nattier-Langenfild Comm. 1	5-3N-1E	1475	Bethel	1456	120	1-13
19	Patoka S	Marion	R. H. Troop, Nattier-Langenfild Comm. 4	5-3N-1E	1660; PB 1635	Rosiclare	1624	10; 75	2-17
20	Posey	Clinton	C. G. Hardin, Lampen 2	16-1N-2W	2782; PB 2730	Devonian	2672	30; 18	3-31
21	Raleigh S	Saline	E. F. Rue, G. Oglesby 1	27-8S-6E	2970	Waltersburg	2046	300	7-15
22	Reservoir	Jefferson	Louis Kapp, C. Wilson 1	30-1S-3E	2560; PB 2480	Rosiclare	2443	2; 35	6-9
23	St. James	Fayette	Texaco Inc., C. Wright 17	31-6N-3E	1925; PB 1877	Bethel	1746	12; 73	1-20
24	Storms C	White	James P. Roszel, W. A. McCarty 1	18-6S-10E	2673; PB 2487	Hardinsburg	2476	45; 6	6-2
25	Trumbull C	White	Inland Prod. Co., Ruth Simmons 1	25-5S-8E	3250; PB 3210	Bethel	2955	120; 85 <sup>e</sup>	9-30
26	Wamac	Marion	Natl. Assoc. Pet. Co., Kalberkamp 1	30-1N-1E	3074; PB 3063	Devonian	3000	45; 240	5-26
27	West Seminary	Clay	Gulf Oil Corp., C. E. Pearce 1	6-2N-7E	3149; PB 3118	Rosiclare; McClosky	3059; 3068	10; 15	7-8
28	Xenia E	Clay	Keystone Oil Co., Campbell heirs 4	11-2N-5E	2883; PB 2837	Renault	2755	30; 30	10-14

<sup>a</sup> Oil; water.

<sup>b</sup> Producing from two pays.

<sup>c</sup> Producing from three pays.

TABLE 7.—SELECTED LIST OF UNSUCCESSFUL DEEP TESTS, 1959  
C = Consolidated

Line no.	Pool or wildcat	County	Company and farm	Location	Total depth (ft)	Deepest formation	Depth to top (ft)	Date of completion
1	WF <sup>a</sup>	Adams	Bartolo, Stevens 1	26-1S-5W	725	Maquoketa	724	9-30
2	WF	Adams	Quincy Twenty-Second Bldg., Gallagher 1	27-2S-5W	680	Trenton	673	10-7
3	WF	Adams	Thomas, Vahle Farm 1	16-2S-7W	399	Devonian	376	6-22
4	WF	Brown	Clyde D. Williams, N. B. Perry 1	30-1S-2W	1,125	St. Peter	1,120	9-16
5	WN <sup>b</sup>	Brown	M. H. Richardson, Jesse Roberts Comm. 1	6-2S-4W	930	Trenton	798	12-9
6	WF	Cass	Dwight Beckham, Stribling 1	4-17N-8W	1,620	Trenton	1,514	12-2
7	WF	Champaign	Vandenbergh, Reynolds 2	1-22N-7E	303	Silurian	270	11-18
8	S-lilor Springs C	Clay	McCollum & Kincaid, Marty Storck 1-D	5-5N-7E	4,486	Devonian	4,356	10-21
9	WF	Coles	J. H. Miskell, Joe Grant 1	5-13N-9E	3,800	Trenton	3,644	4-7
10	WF	Coles	J. H. Miskell, Solheim-Pearce Comm. 1	34-13N-9E	3,141	Trenton	2,988	1-27
11	New Bellair	Crawford	Rockford Petro. Co., R. Gwinn 1	19-8N-13W	2,801	Devonian	2,641	2-24
12	WN	Douglas	Henry P. Smith, Nellie Doty 1	8-14N-8E	3,812	Trenton	3,676	5-5
13	WF	Douglas	Jackson & Wrather Oil Co., Helen Wyatt 1	24-15N-8E	1,345	Trenton	1,198	4-28
14	WF	Douglas	Henigman, Birdge 1	23-16N-9E	683	Devonian	666	8-26
15	WF	Effingham	Cecil Poc, Voelker 1	6-7N-4E	3,505	Devonian	3,366	7-15
16	WN	Fayette	Belden, Meyer 1	12-5N-2E	3,560	Silurian	3,522	9-16
17	WF	Fayette	G. H. Fox, C. P. Smith 1	14-6N-1W	2,930	Devonian	2,786	1-20
18	WF	Greene	John S. Adams, Hallock 2	15-12N-13W	860	St. Peter	855	9-23
19	WF	Greene	Frank Mattix, Lowenstein 2	21-12N-13W	840	St. Peter	815	3-10
20	WF	Hancock	Shaw & Huff, Allen 1	19-4N-8W	737	Devonian	605	8-26
21	Divide West.	Jefferson	Texaco Inc., W. P. Green, NCF-1, 6	22-1S-3E	4,700	Devonian	4,347	7-8
22	WF	Kankakee	Richardson, Hoekstra 1	5-31N-10E	400	Trenton	102	9-2
23	WF	Kankakee	Jerome Levatino, John Schott 2	2-30N-9E	1,947	Fau Claire	1,862	4-14
24	WF	Logan	S. W. Kluzek & Assoc., Allison 1	3-19N-3W	1,480	Silurian	1,402	3-10
25	WF	Logan	V. S. & S. Drlg. Co., Martin 1	31-20N-3W	1,921	Trenton	1,824	11-11
26	WF	McDonough	Chas. Measley, Jesse Raymond 1	21-4N-3W	915	Trenton	770	5-5
27	WF	McDonough	Hickey, Strode 1	29-6N-2W	670	Dev. Sil	615	9-16
28	WF	McLean	Ring & Kinsell, Hunter 1	10-23N-6E	2,012	Trenton	1,825	12-2
29	WN	Macoupin	Lascoy, Stamme 1	9-7N-7W	1,535	Devonian	1,522	2-10
30	WN	Macoupin	Kesl, Stone 3	27-7N-7W	1,560	Devonian	1,457	11-24
31	WF	Madison	John S. Homeier, Kruckeberg 1	32-6N-7W	2,076	Trenton	2,020	9-9
32	WF	Madison	N. B. Smith, Ulrich 1	17-6N-10W	1,113	Trenton	990	2-10
33	Wamac	Marion	Natl. Assoc. Pet. Co., F. J. Kalberkamp 1	19-1N-1E	4,160	Trenton	4,048	7-1
34	Junction City C	Marion	Natl. Assoc. Pet. Co., Marion County Coal Co. 1	32-2N-1E	3,346	Devonian	3,224	3-17
35	Kimmunity	Marion	Natl. Assoc. Pet. Co., E. Pruett 1	13-4N-2E	3,650	Devonian	3,567	10-14

36	WF	.	.	.	.	Mason	Niagara Oil Co., Friend 1	21-20N-8W	1,167	Trenton	1,100	8-19
37	WF	.	.	.	.	Mason	F. W. Engelke, Mohlman 1	1-20N-9W	1,400	Trenton	1,141	7-15
38	WF	.	.	.	.	Menard	Soliday & Bertinetti, Minor 1	4-17N-6W	1,230	Silurian	1,229	10-28
39	WF	.	.	.	.	Menard	Shawnee Petro. Co., Carl Schmidt 1	23-19N-7W	1,845	St. Peter	1,788	4-21
40	WF	.	.	.	.	Moultrie	Obering, Davis Comm. 1	23-14N-4E	2,890	Devonian	2,782	1-27
41	WF	.	.	.	.	Moultrie	Frederick, Smith et al. 1	28-15N-4E	2,673	Devonian	2,673	1-20
42	WF	.	.	.	.	Moultrie	Harold C. Sanders, L. L. Harrison 1	22-15N-5E	3,642	Trenton	3,506	8-19 <sup>e</sup>
43	WF	.	.	.	.	Piatt	Hill Production Co., W. J. Grady et al. 1	24-16N-4E	2,460	Devonian	2,452	11-18
44	WF	.	.	.	.	Piatt	Jay-Vee Dev. Co., Woodward 1	17-17N-5E	2,400	Silurian	2,344	5-12
45	WF	.	.	.	.	Piatt	Theo. Myers, Kirkland 1	34-19N-5E	1,786	Devonian	1,762	12-22
46	WF	.	.	.	.	Piatt	Ther. Myers, Valentine 1	12-19N-6E	1,300	Maquoketa	1,125	5-12
47	WN	.	.	.	.	Pike	Ray F. Starr, Ralph McLaughlin "A" 1	8-4S-4W	1,052	St. Peter	1,050	4-7
48	Fishhook.	.	.	.	.	Pike	Ray F. Starr, Hill 1	1-4S-5W	1,018	St. Peter	1,017	4-7
49	WN	.	.	.	.	Pike	Ray F. Starr, Holmes 1	11-4S-5W	995	St. Peter	992	4-28
50	WF	.	.	.	.	Pope	Rigney & Owens (was Rigney & Dodson), J. H. Lewis 1	18-16S-7E	4,104	Trenton	3,766	10-14 <sup>e</sup>
51	WF	.	.	.	.	Randolph	Kewance Oil, Schup Unit 1	4-5S-5W	2,422	Silurian	2,312	12-16
52	WF	.	.	.	.	Randolph	Hammer, Huey 1	35-5S-6W	2,147	Silurian	2,037	1-6
53	WF	.	.	.	.	Randolph	Sherman Drig. Co., Schuline 1	27-5S-7W	1,895	Trenton	1,867	4-21
54	Clay City C	.	.	.	.	Richland	Pure Oil Co., C. T. Montgomery "B" 18	4-3N-9E	6,800	St. Peter	6,665	6-16 <sup>a</sup>
55	WF	.	.	.	.	St. Clair	T. R. Kerwin, Goodman 1	5-3S-7W	1,816	Trenton	1,769	8-26
56	WF	.	.	.	.	St. Clair	Joe Dull, Schmidt 1	22-3S-7W	1,768	Trenton	1,740	5-19
57	WF	.	.	.	.	Sangamon	Reuter & Hirstein, White 1	29-16N-7W	1,095	Silurian	1,088	6-9
58	WF	.	.	.	.	Sangamon	Audrey May Brians, Thornton 1	23-15N-7W	1,811	Trenton	1,754	1-13
59	WF	.	.	.	.	Sangamon	V. S. & S. Drig. Co., Bryson 1	15-17N-3W	1,740	Silurian	1,635	7-1
60	WF	.	.	.	.	Schuyler	M. M. Speckler, Herron 1	13-1N-1W	954	Trenton	940	9-23
61	WF	.	.	.	.	Schuyler	Jay-Vee Dev. Corp., Shelts et al. 1	2-2N-3W	745	Trenton	720	11-18
62	WF	.	.	.	.	Shelby	Aladdin Oil Dev. Co., Priehs 1	12-10N-1E	3,100	Silurian	3,060	9-2
63	WF	.	.	.	.	Shelby	Roman D. Miller, G. E. Coultis "A" 4	27-14N-3E	2,830	Devonian	2,782	12-2 <sup>e</sup>
64	WF	.	.	.	.	Vermilion	James R. Dollahan, Kelley 1	21-20N-11W	2,549	Shakopee	2,504	6-23
65	WF	.	.	.	.	Vermilion	Joe Beckner, C. H. White 1	16-21N-11W	900	Silurian	870	11-11
66	WF	.	.	.	.	Warren	Morris, Adkisson 1	5-8N-2W	755	Maquoketa	755	6-2
67	New Memphis East	.	.	.	.	Wayne	C. E. Brehm, Kockamohr 1	5-1S-4W	3,070	Trenton	2,997	1-13
68	Orchardville North	.	.	.	.	Wayne	Natl. Assoc. Pet. Co., Bookout Unit 1	18-1N-5E	4,684	Devonian	4,546	10-14
69	Aden C	.	.	.	.	Wayne	Don Lawrence (was T. G. Jenkins), W. S. Lawrence 1	27-2S-7E	4,196	Warsaw	4,095	10-7 <sup>e</sup>
70	Aden C	.	.	.	.	Wayne	Carter & Uphoff, Bridges 1	29-2S-7E	4,247	Osage	4,205	9-30 <sup>e</sup>
71	Aden C	.	.	.	.	Wayne	Dee Drig. Co., J. E. Fleming 1	32-2S-7E	4,192	Harrodsburg	4,175	8-19

<sup>a</sup> WF=Wildcat far (more than two miles from nearest production).

<sup>b</sup> WN=wildcat near (one-half to two miles from nearest production).

<sup>c</sup> Old well worked over.

<sup>d</sup> Plugged back and completed as oil producer.

	<i>Producing wells completed</i>
Clay City Consolidated . . . . .	91
Dale Consolidated . . . . .	41
Kincaid Consolidated . . . . .	30
Lawrence . . . . .	121
Main Consolidated . . . . .	43
Mt. Auburn Consolidated . . . . .	75
New Harmony Consolidated . . . . .	35
Omaha . . . . .	24
Sailor Springs Consolidated . . . . .	30
Trumbull Consolidated . . . . .	23
Westfield . . . . .	35
West Seminary. . . . .	25

Lawrence pool, discovered in 1906 and one of the oldest pools in the state, had the most producing wells completed in 1959. Two of the other old pools, Westfield discovered in 1905 and Main Consolidated discovered in 1906, are among the top seven pools in number of producing wells completed during the year.

Depths of producing wells drilled in 1959 ranged from 267 to 5,379 feet. Average depth of all wells drilled in 1959 was about 2,195 feet.

An outstanding feature of drilling activity in Illinois in 1959 was the search for deeper pay possibilities in the central producing area of the basin. Enough success was achieved to warrant continued search. Discovery of two new producing zones in Aden Consolidated pool, Wayne County, highlighted the activity. One of these, the Harrodsburg Limestone, is a new pay zone for the state. In June the H. H. Weinert Estate reworked the Morlan "B" 5, a former McClosky and Salem producer in sec. 33, T. 2 S., R. 7 E. It was cleaned out to the old total depth of 4,148 feet and recompleted for 138 barrels of oil a day, flowing through  $\frac{3}{8}$ -inch choke, from fragmental limestone of the Harrodsburg zone (Mississippian age), topped at 4,132 feet. This new pay zone is about 400 feet deeper than the Salem Limestone, previously the deepest producing zone in the pool. Subsequently Texaco Inc. also completed a Harrodsburg well in the pool. The Harrodsburg also was added as a new pay to both the Bungay Consolidated pool in Hamilton County, and the Mill Shoals pool in White County, each of which had one Harrodsburg well at the end of the year. The lone well com-

pleted in the Belle Prairie West pool, Hamilton County, also produces from the Harrodsburg. The Harrodsburg is more than 4,000 feet below the surface in each of these wells.

In December Texaco Inc. completed its Silverman 16 well in Aden Consolidated pool, sec. 16, T. 3 S., R. 7 E., Wayne County, for 207 barrels of oil a day, flowing through 18/64-inch choke, from the Dutch Creek Standstone of Devonian age, topped at 5,319 feet, about 1,150 feet below the Harrodsburg. This is the deepest producing well in Illinois.

Two deeper new pays, Carper and Devonian, were added to Kenner pool in Clay County in 1959. Both produce from the same well, the Texaco Inc., Allen "A" 7, sec. 36, T. 3 N., R. 5 E. The top of the Carper pay is at 4,221 feet, and the Devonian, 4,447 feet. The previous deepest pay zone in the pool was the McClosky at about 2,920 feet.

Kincaid Consolidated pool in Christian County, which heretofore had produced only from the Devonian, had a Silurian well completed in 1959, a new pay discovery that might prove significant for the area. Silurian rocks provide the pay zone in the other western Christian County pools as well as in Macon and Sangamon Counties.

## PRODUCTIVE ACREAGE

The revised 1960 edition of "An Act in Relation to Oil, Gas, Coal and other Surface and Underground Resources and Rules and Regulations," which is issued by the Department of Mines and Minerals, in Springfield, includes changes in spacing regulations. These regulations now establish a 40-acre spacing pattern for wells completed as producers between a depth of 4,000 and 6,000 feet, and a 160-acre spacing pattern for wells that are drilled below 6,000 feet. Prior to this change, the normal spacing pattern had been 10 acres for each well producing from sandstone and 20 acres for each well producing from limestone, and this still applies to wells less than 4,000 feet deep.

TABLE 8.—NUMBER OF GEOPHYSICAL AND CORE DRILLING CREWS ACTIVE IN ILLINOIS DURING 1959, BY MONTHS

Month	Seismo-graph	Gravity meter <sup>a</sup>	Magne-tometer <sup>a</sup>	Core Drill <sup>b</sup>
Jan. . . . .	0	2	1	2 (2)
Feb. . . . .	0	3	1	1 (1)
Mar. . . . .	0	3	1	1 (1)
Apr. . . . .	0	0	0	3 (3)
May . . . . .	0	0	0	6 (6)
June . . . . .	0	0	0	5 (4)
July . . . . .	1	0	0	6 (3)
Aug. . . . .	1	0	0	6 (5)
Sept. . . . .	1	0	0	7 (5)
Oct. . . . .	0	0	0	7 (5)
Nov. . . . .	0	0	0	9 (6)
Dec. . . . .	0	0	0	4 (2)

<sup>a</sup> All of the gravity meter and magnetometer activity in 1959 was in connection with gas storage.

<sup>b</sup> Figures in parentheses refer to number of crews included in total that worked on gas storage projects.

For our total acreage figures, a well producing from more than one pay horizon has been assigned acreage for only one well, rather than for each pay. Proven productive acreage in Illinois increased by 12,280 acres during 1959 as a result of the completion of 1,061 oil and gas wells, including the workover wells. Oil and gas acreage figures given below show the totals for the last two years and the amount of increase.

Year	Oil productive acreage	Gas productive acreage
1958 . . . . .	562,535	31,225
1959 added acreage . . .	12,090	190
1959 (end of year) . . .	574,625	31,415

Pools discovered during 1959 account for 740 additional acres. As in previous years, most of the new gas wells were capped because of the present lack of market.

## ESTIMATED PETROLEUM RESERVES

Petroleum reserves in Illinois on January 1, 1960, are estimated at 596.1 million barrels. The tabulated recapitulation of data covering the last ten-year period indicates that our present estimated oil reserves are slightly below the 1951 figure and 105.5 million barrels below the highest figure, which was reached in 1957. The greatest variation has occurred in changes due to additions added by secondary recovery projects and revisions of previous estimates of reserves.

A total of 1,043 producing wells was completed during 1959, only 11 less than in 1958. Of these, 53 were former dry holes that were worked over and recompleted as producing wells, and 27 were former producing wells that were recompleted, producing from the same or other producing zones.

Mississippian producers accounted for 80 percent of the estimated 22.0 million barrels of reserves added by 1959 drilling. Chester formations added about 70 percent of the total Mississippian reserves, with the Aux Vases and Cypress being the greatest contributors. Production from porous McClosky zones added one-half of the reserves

ESTIMATED PETROLEUM RESERVES, 1950-1959  
(in millions of barrels)

Publication cited	Year	Production	Reserves added		Estimated reserves at end of year
			by new drilling	by secondary recovery projects and revisions	
Ill. Pet. 64 . . . . .	1950	62.0	39.1	130.1	615.7
Ill. Pet. 67 . . . . .	1951	60.2	28.8	108.4	692.7
Ill. Pet. 69 . . . . .	1952	60.1	24.9	10.1	667.6
Ill. Pet. 71 . . . . .	1953	59.1	47.2	26.2	681.9
Bull. 79 . . . . .	1954	66.9	69.8	6.9	691.7
Bull. 81 . . . . .	1955	81.1	68.9	21.8	701.3
Bull. 83 . . . . .	1956	82.3	47.4	35.2	701.6
Bull. 85 . . . . .	1957	76.6	27.0	15.3	667.3
Bull. 87 . . . . .	1958	80.8	22.1	16.2	624.8
Bull. 88 . . . . .	1959	76.7	22.0	26.0	596.1

TABLE 9.—POOLS INCORPORATED INTO OTHER POOLS BY CONSOLIDATION  
C = Consolidated

Original pool name; first consolidation	Present pool assignment	Date of first con- sol.	Original pool name; first consolidation	Present pool assignment	Date of first con- sol.
Aden N . . . . .	Aden C	1944	Ellery W; Ellery C . . . .	Goldengate C	1952
Allbion N . . . . .	Allbion C	1944	Enterprise . . . . .	Clay City C	1941
Allison-Weger . . . . .	Main C	1955	Enterprise W . . . . .	Clay City C	1941
Assumption N . . . . .	Assumption C	1953	Epworth C . . . . .	Storms C	1957
Barnhill E . . . . .	Goldengate C	1944	Epworth E; Epworth C . .	Storms C	1951
Bend . . . . .	New Harmony C	1952	Fairfield . . . . .	Clay City C	1953
Bennington . . . . .	Maple Grove C	1952	Fairfield E. . . . .	Clay City C	1953
Bible Grove C . . . . .	Sailor Springs C	1949	Flannigan . . . . .	Dale C	1955
Bible Grove E; Bible Grove C. . . . .	Sailor Springs C	1948	Flat Rock . . . . .	Main C	1954
Birds . . . . .	Main C	1955	Flora . . . . .	Sailor Springs C	1955
Blairsville . . . . .	Bungay C	1951	Friendsville . . . . .	New Harmony C	1949
Bone Gap S . . . . .	Bone Gap C	1952	Friendsville S . . . . .	New Harmony C	1949
Bonpas . . . . .	Parkersburg C	1951	Gallagher . . . . .	Calhoun C	1946
Bonpas W . . . . .	Parkersburg C	1944	Gards Point N . . . . .	Gards Point C	1957
Boos; Dundas C . . . . .	Clay City C	1941	Geff . . . . .	Clay City C	1947
Boos E; Willow Hill C . .	Clay City C	1947	Geff W. . . . .	Clay City C	1948
Boos N . . . . .	Clay City C	1948	Goldengate W . . . . .	Goldengate N C	1953
Bourbon N . . . . .	Bourbon C	1958	Gossert . . . . .	Roland C	1954
Boyleston C . . . . .	Clay City C	1948	Grayville . . . . .	Phillipstown C	1948
Brownsville; Stokes- Brownsville . . . . .	Roland C	1946	Grayville W . . . . .	Albion C	1949
Burnt Prairie; Leach Twp. .	Goldengate C	1947	Griffin . . . . .	New Harmony C	1941
Calvin . . . . .	New Harmony C and Phillips- town C	1941	Helena . . . . .	Ruark W C	1952
Calvin N . . . . .	Phillipstown C	1948	Herald E; Concord S C . .	Herald C	1953
Cantrell C . . . . .	Dale C	1955	Herald N . . . . .	Storms C	1953
Cantrell N. . . . .	Dale C	1956	Hoodville . . . . .	Dale C	1943
Cantrell S; Cantrell C . .	Dale C	1953	Hoosier; Bible Grove C . .	Sailor Springs C	1948
Chapman . . . . .	Main C	1954	Hoosier N; Bible Grove C .	Sailor Springs C	1948
Christopher C . . . . .	Sessor C	1958	Hunt City S . . . . .	Clay City C	1959
Cisne . . . . .	Clay City C	1948	Ingraham W; Bible Grove C	Sailor Springs C	1948
Cisne N . . . . .	Clay City C	1954	Inman . . . . .	Inman W C	1950
Clay City N . . . . .	Clay City C	1954	Inman Central . . . . .	Inman W C	1949
Concord Central; Concord S C . . . . .	Herald C	1952	Inman N . . . . .	Inman W C	1949
Concord N . . . . .	Concord C	1955	Inman S . . . . .	Inman W C	1950
Concord S C . . . . .	Herald C	1955	Iron C . . . . .	Roland C	1954
Cooks Mills E . . . . .	Cooks Mills C	1956	Junction City S . . . . .	Junction City C	1958
Cooks Mills Gas . . . . .	Cooks Mills C	1955	Keensburg C . . . . .	New Harmony C	1948
Cooks Mills N . . . . .	Cooks Mills C	1955	Kincaid S . . . . .	Kincaid C	1958
Cottonwood . . . . .	Herald C	1953	Lancaster N . . . . .	Ruark W C	1952
Cottonwood N . . . . .	Herald C	1953	Lancaster W . . . . .	Berryville C	1949
Covington; Boyleston C . .	Clay City C	1944	Leech C . . . . .	Goldengate C	1948
Covington E . . . . .	Clay City C	1948	Maple Grove E . . . . .	Parkersburg C	1952
Cowling . . . . .	New Harmony C	1947	Mason . . . . .	Iola C	1956
Dead River . . . . .	New Haven C	1950	Mason S . . . . .	Iola C	1948
Dix . . . . .	Salem C	1954	Maud Central; Maud N C .	New Harmony C	1949
Dubois W . . . . .	Dubois C	1955	Maud C . . . . .	New Harmony C	1951
Dundas C . . . . .	Clay City C	1948	Maud N C . . . . .	New Harmony C	1951
Dundas E. . . . .	Olney C	1958	Maud W; Maud N C . . .	New Harmony C	1948
Eldorado Central. . . . .	Eldorado C	1954	Maunie . . . . .	Maunie S C	1948
Eldorado N . . . . .	Eldorado C	1955	Maunie W. . . . .	Maunie N C	1955
Ellery C . . . . .	Goldengate C	1958	Merriam . . . . .	Clay City C	1953
			Mitchell; Ellery C . . . .	Goldengate C	1952
			Mt. Auburn Central . . . .	Mt. Auburn C	1954
			Mt. Auburn E . . . . .	Mt. Auburn C	1954
			Mt. Carmel W . . . . .	New Harmony C	1948

TABLE 9.—(Continued)

Original pool name; first consolidation	Present pool assignment	Date of first con- sol.	Original pool name; first consolidation	Present pool assignment	Date of first con- sol.
Mt. Erie . . . . .	Clay City C	1944	Shelbyville E . . . . .	Shelbyville C	1956
Mt. Erie S . . . . .	Clay City C	1948	Sims . . . . .	Johnsonville C	1948
New Haven N . . . . .	Concord E C	1950	Sims N . . . . .	Johnsonville C	1945
New Haven W . . . . .	Inman E C	1949	Sorento S . . . . .	Sorento C	1956
New Hebron . . . . .	Main C	1955	Springerton . . . . .	Bungay C	1946
Noble . . . . .	Clay City C	1948			
Noble N . . . . .	Clay City C	1948	Stanford . . . . .	Clay City C and Sailor Springs C	1953
Noble S . . . . .	Clay City C	1948	Stanford W . . . . .	Sailor Springs C	1953
Norris City . . . . .	Roland C	1955	Stokes-Brownsville; Iron C .	Roland C	1953
North City; Christopher C .	Sesser C	1954	Swearingen Gas . . . . .	Main C	1955
Olney E . . . . .	Olney C	1949	Toliver . . . . .	Hord S C	1955
Parker . . . . .	Main C	1954	Trumbull W . . . . .	Trumbull C	1959
Parkersburg N . . . . .	Parkersburg C	1951	West End . . . . .	Dale C	1955
Patton . . . . .	Allendale C	1948	West Frankfort S . . . . .	West Frankfort C	1948
Patton W . . . . .	Allendale C	1948	West Liberty; Dundas C .	Clay City C	1941
Roundprairie . . . . .	Johnsonville C	1941	Williams S . . . . .	Williams C	1953
Rural Hill . . . . .	Dale C	1951			
Rural Hill W . . . . .	Dale C	1955	Willow Hill C . . . . .	Clay City C	1948
Sailor Springs S . . . . .	Sailor Springs C	1942	Willow Hill N; Willow Hill C . . . . .	Clay City C	1947
Sailor Springs W . . . . .	Sailor Springs C	1949	Woburn S . . . . .	Woburn C	1950
Schnell S . . . . .	Clay City C	1959			

for the lower Mississippian formations. For the first time the Harrodsburg in the lower part of the Salem Limestone or the upper part of the Warsaw Formation was recognized as a separate pay zone in Illinois. Production from this zone was formerly included in Salem statistics.

Pennsylvanian and Trenton wells each accounted for only about three percent of the additional reserves. The Devonian accounted for only about 2 percent, whereas about 12.5 percent of the new reserves was added by Silurian wells.

Mississippian wells are credited with 84 percent of the estimated 1,265,000 barrels of oil reserves added by the pools discovered during 1959. Silurian formations added 13.5 percent, and Pennsylvanian and Devonian formations together accounted for about 2.5 percent of these reserves.

## GAS AND GAS PRODUCTS

An estimated 30 billion cubic feet of gas was produced from Illinois wells during 1959, either as solution gas or in separate gas reservoirs in the oil areas.

Approximately 1,616.9 million cubic feet of Illinois gas was marketed in Illinois during the year. About 1,081.5 million cubic feet of this was dry gas obtained from gas wells within producing oil fields and the remainder was gas collected from oil wells. Nearly 45 million cubic feet of the total was distributed by an operating company in Carmi with the rest going to pipeline outlets for distribution away from the producing areas.

Over 3.3 billion cubic feet of dry or solution gas from Illinois oil wells was processed during 1959 by the three principal operating companies, with the resultant production of 769,143 barrels of natural gasoline and allied products. Approximately 5,375,000 cubic feet of dry residue gas was returned to the producing formations with the remainder being used as plant or lease fuel. The amount of flared gas at the plants was insignificant. These figures do not include data from the one plant in Illinois that processes gas from outside the state and returns the dry residue gas to the pipeline.



GAS PRODUCED IN ILLINOIS AND MARKETING  
IN 1959

<i>Field, County</i>	<i>Market</i>	<i>Amount used (cu. ft.)</i>
Herald Consolidated, White-Gallatin . . . .	Carmi	44,571,000
Eldorado Consolidated, Saline . . . . .	Pipeline	187,716,000
Eldorado East, Saline . . . .	Pipeline	58,869,000
Cooks Mills Consolidated, Coles . . . . .	Pipeline	835,500,000
Harco, Harco East and Raleigh South, Saline . . . .	Pipeline	387,061,000
Wamac East, Marion . . . .	Pipeline	103,233,000
Total		1,616,900,000

UNDERGROUND GAS STORAGE

Underground gas storage projects are in operation at Cooks Mills in Coles County, Herscher in Kankakee County, Waterloo in Monroe County, Eagerville in Macoupin County, and Freeburg in St. Clair County.

The Cooks Mills and Freeburg projects are in areas of formerly shut-in gas wells; Waterloo is in an aquifer of an abandoned oil field; Eagerville is in the old depleted Gillespie-Benld gas pool; and Herscher is in two aquifers of a structure which at one time produced a small amount of oil from a higher zone.

Two more projects, at Troy Grove in LaSalle County and St. Jacob in Madison County, are expected to be in operation in the summer of 1960. The project at St. Jacob is in an aquifer of the St. Jacob oil pool, and the Troy Grove project is in a structure far removed from any oil or gas production.

Continued experimenting is in progress at the Waverly gas storage project in Morgan County. Investigations are under way by several companies into the feasibility of gas storage in other areas of Illinois.

TABLE 10.—OIL PRODUC-

## EXPLANATION OF ABBREVIATIONS

Pool: N, North; S, South; E, East; W, West; C, Consolidated; Cen, Central.  
 Age: Precam, Precambrian; Ord, Ordovician; St. P, St. Peter; Tren, Trenton; Sil, Silurian;  
 Dev, Devonian; Mis, Mississippian; Pen, Pennsylvanian.  
 Character of formation: L, limestone; LS, sandy limestone; OL, oolitic limestone; D, dolomite;  
 DS, sandy dolomite; S, sandstone.

Line no.	Pool; County; Twp.-Range	Pay zone		Year of discovery	Area proved (acres)	Oil production		
		Name, age and depth	Total primary and secondary					
			During 1959			To end of 1959		
1	Ab Lake; Gallatin; 8S; 10E	Pennsylvanian, Pen	805	1947	110	5	43	
2		Palestine, Mis	1,835		30	x	x	
3		Waltersburg, Mis	2,000		40	0	0	
4		Renault, Mis	2,735		40	0	x	
5		Aux Vases, Mis*	2,770		40	0	x	
6		Ab Lake S; Gallatin; 9S; 10E	Aux Vases, Mis	2,798	1959	10	2	2
7						300	27	169
8						10	0	0
9		Ab Lake W; Gallatin; 8-9S; 9-10E	Pennsylvanian, Pen	725		10	0	0
10	Waltersburg, Mis		2,020		110	x	x	
11	Aden C; Hamilton, Wayne; 2-3S; 7E	Tar Springs, Mis	2,075	1958	20	x	x	
12		Cypress, Mis*	2,425		10	x	x	
13		Aux Vases, Mis	2,735		160	x	x	
14		McClosky, Mis	2,830		20	0	2.5	
15		2 or more pays						
16		Aux Vases, Mis	3,200	1938	2,500	210	8,692	
17		Ohara, Mis*	3,290		1,340	x	x	
18		Rosiclare, Mis	3,320		140	x	x	
19		McClosky, Mis	3,350		100	x	x	
20					2,340	x	x	
21		Aden S; Hamilton; 3S; 7E	Salem, Mis	3,735		140	x	x
22	Harrodsburg, Mis		4,132	1959	40	x	x	
23	Dutch Creek, Dev		5,318		80	x	x	
24	2 or more pays							
25	Aux Vases, Mis		3,245	1945	400	22	593	
26	Ohara, Mis*		3,310		100	x	x	
27	Rosiclare, Mis		3,330		20	x	x	
28	McClosky, Mis		3,395		160	x	x	
29	2 or more pays				340	x	x	
30								
31	Akin; Franklin; 6S; 4E		Cypress, Mis	2,840	1942	610	192	1,520
32		Aux Vases, Mis	3,100	180		x	x	
33		Ohara, Mis	3,100	410		x	x	
34		McClosky, Mis*	3,270		80	x	x	
35		2 or more pays			20	x	x	
36		Akin W; Franklin; 6S; 4E						
37		Cypress, Mis	2,715	1948	100	3	88	
38		Ohara, Mis*	3,050		20	x	x	
39		Rosiclare, Mis*	3,080		20	0	x	
40				20	x	x		
41	Albion Cen; Edwards; 2S; 10E	McClosky, Mis	3,130		60	x	x	
42		2 or more pays						
43		Ohara, Mis	3,350	1955	180	8	119	
44		McClosky, Mis*	3,395		180	x	x	
45		2 or more pays			20	x	x	
46	Albion C;† Edwards, White; 1-3S; 10-11E, 14W							
47		Mansfield, Pen	1,650	1940	5,790	1,072	20,022	
48		Bridgeport, Pen	1,900		60	x	x	
49		Biehl, Pen	2,000		300	x	x	
50					1,500	x	x	
51								
52	Degonia, Mis	2,125		20	x	x		
53	Waltersburg, Mis	2,365		630	x	x		
54	Tar Springs, Mis	2,460		90	x	x		
55	Hardinsburg, Mis	2,635		60	x	x		
56	Cypress, Mis	2,860	1958	410	x	x		
57	Paint Creek, Mis	2,911		70	x	x		
58	Bethel, Mis	2,960		430	x	x		
59	Renault, Mis	3,000		100	x	x		
60	Aux Vases, Mis	3,045		1,060	x	x		
	Ohara, Mis	3,110		200	x	x		

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

## TION IN ILLINOIS, 1959

## EXPLANATION OF ABBREVIATIONS

Structure: A, anticlinal; C, accumulation due to change in character of rock; D, dome; F, faulting an important factor in oil accumulation; f, faulting a minor factor in oil accumulation; H, strata horizontal or nearly horizontal; L, lens; M, monocline; N, nose; R, reef; T, terrace; U, unconformity; X, structure not determined.

Combinations of the above letters are used where more than one factor applies.

Secondary recovery: W, waterflooding; P, pressure maintenance.

x—Correct figure not determinable.

(M bbls.)		Number of wells					Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959					Gravity API	Sulfur percent	Character.	Av. thickness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandoned	Producing end of year									
		8	0	0	5						M	Mis	2,953	2
		3	0	0		x	x	S	10	5	M			3
		1	0	0		x	x	S	5	8	MF			4
		2	0	0		x	x	S	10	8	M			5
		2	0	0		35	x	L	8	9	MF			6
		0	0	0		35	x	S	9	6	MF			7
0.5	0.5	1	1	0	1	x	x	S	6		M	Mis	2,975	8
		24	2	3	17			S	10		ML	Mis	2,964	9
W		1	0	0		x	x	S	20		ML			10
		8	2	1		x	x	S	10		ML			
		2	0	2		x	x	S	10		ML			11
		0	0	0		x	x	S	9		ML			12
		9	0	0		x	x	S	6		ML			13
		1	0	0		x	x	L	2		MC			14
		3	0	0										15
60	1,342	111	3	0	91						A	Dev	5,395	16
W		20	0	0		35	x	S	10		A			17
		0	0	0		35	x	L	7		A			18
		2	0	0		35	x	LS	5		AC			19
W		74	0	2		35	x	L	4		A			20
		7	3	1		40	x	L	16		AC			21
		2	2	0		x	x	L	16					22
		1	1	0		x	x	S	20					23
		14	2	1										24
		21	0	2	15						A	Mis	3,466	25
		2	0	0		x	x	S	8		AL			26
		0	0	0		x	x	L	7		AC			27
		1	0	1		x	x	LS	8		AC			28
		9	0	1		39	x	L	9		AC			29
		9	0	0										30
		50	4	1	45						A	Mis	3,515	31
		11	0	0		33	0.14	S	10		AL			32
		34	4	0		38	0.12	S	22		AL			33
		4	0	1		x	x	L	18		AC			34
		0	0	0		x	x	L	9		AC			35
		1	0	0										36
		6	0	0	4						A	Mis	3,435	37
		2	0	0		x	x	S	8		AL			38
		0	0	0		x	x	L	10		AC			39
		0	0	0		x	x	L	12		AC			40
		3	0	0		x	x	L	4		AC			41
		1	0	0										42
		7	0	1	3						X	Mis	3,510	43
		6	0	1		x	x	L	5		X			44
		0	0	0		x	x	L	4		X			45
		1	0	0										46
572	4,187	456	7	12	371						AM	Dev	5,185	47
W		4	0	1		35	x	S	5		MF			48
W, P		19	0	0		35	0.16	S	15		MF			49
		100	0	1		34	0.16	S	15		MF			50
		1	0	0		35	x	S	9		MF			51
W		37	0	0		35	x	S	16		AL			52
W		4	0	2		37	x	S	5		AL			53
		3	0	0		36	x	S	10		A			54
W		35	3	6		37	x	S	15		A			55
		7	3	0		x	x	S	12		A			56
		28	0	0		35	x	S	14		Af			57
		1	0	0		35	x	S	13		Af			58
W		82	0	2		35	x	S	18		Af			59
		9	0	0		40	x	L	5		AC			60

TABLE 10.—

Line no.	Pool; County; Twp.—Range	Pay zone		Year of discovery	Area proved (acres)	Oil production	
		Name, age and depth	Total primary and secondary				
			During 1959			To end of 1959	
61	Albion E; Edwards; 2S; 14W	Rosiclare, Mis	3,130	1943	60	x	x
62		McClosky, Mis	3,200		1,720	x	x
63		2 or more pays					
64		Cypress, Mis	2,800		790	44	1,147
65		Paint Creek, Mis*	2,910		120	x	x
66		Bethel, Mis	2,920		10	x	x
67		Renault, Mis	2,925		20	x	x
68		Aux Vases, Mis	3,020		60	x	x
69		Ohara, Mis	3,100		150	x	x
70					200	x	x
71	Albion W; Edwards; 3S; 10E Allendale; Lawrence, Wabash; 1-2N; 11-13W	Rosiclare, Mis	3,125	1953	100	x	x
72		McClosky, Mis	3,155		240	x	x
73		2 or more pays					
74		McClosky, Mis	3,375		20	abd 1953	1
75							
76		Pleasantview, Pen	660		8,250	429	17,255
77		Bridgeport, Pen	1,070		x	x	x
78		Buchanan, Pen	1,290		x	x	x
79		Biehl, Pen	1,450		x	x	x
80		Jordan, Pen	1,490		x	x	x
81		Waltersburg, Mis	1,540		x	x	x
82		Tar Springs, Mis	1,600		x	x	x
83		Hardinsburg, Mis	1,780		x	x	x
84		Cypress, Mis	1,920		x	x	x
85		Bethel, Mis	2,010		x	x	x
86		Aux Vases, Mis	2,280		x	x	x
87		Ohara, Mis	2,300		x	x	x
88		Rosiclare, Mis	2,300		x	x	x
89		McClosky, Mis	2,300		x	x	x
90		2 or more pays					
91	Alma; Marion; 4N; 2E	Cypress, Mis*	1,805	1941	70	1	82
92		Bethel, Mis	1,945		10	0	x
93		Rosiclare, Mis	2,085		60	x	x
94		McClosky, Mis	2,960		160	x	x
95		Rosiclare, Mis	2,890		20	2	31
96		Aux Vases, Mis	2,925		10	abd 1953	.1
97		Bethel, Mis	1,430		180	abd 1954	0
98		Pennsylvanian, Pen	415		10	39	181
99						abd 1957	0
100		Unnamed, Pen	420		150	5	12
101	Assumption C; Christian; 13-14N; 1E	Bethel, Mis	1,050	1948	2,900	295	6,395
102		Rosiclare, Mis	1,170		430	x	x
103		Cedar Valley, Dev	2,300		320	x	x
104		Cedar Valley, Dev	2,630		2,870	x	x
105		Cypress, Mis	780		60	1	11
106		Silurian, Sil	1,535		80	abd 1943; rev 1956;	7
107		Aux Vases, Mis	3,325		60	0.5	4,678
108		Ohara, Mis	3,370		1,960	186	4,678
109					740	x	x
110					160	x	x
111	Bartelso; Clinton; 1-2N; 3W	Rosiclare, Mis	3,400	1936	200	x	x
112		McClosky, Mis	3,450		1,180	x	x
113		St. Louis, Mis	3,520		20	x	x
114		Salem, Mis	3,795		40	x	x
115		2 or more pays					
116		Carlyle (Cypress), Mis	985		600	76	3,544
117		Silurian, Sil	2,420		350	x	x
118		Silurian, Sil	2,550		250	x	x
119		Devonian, Dev	2,475		320	43	603
120					100	0	24
121	Bartelso W; Clinton; 1N; 3-4W Beaucoup; Washington; 2S; 2W	Cypress, Mis	960	1945	170	6	34
122		Clear Creek, Dev	3,050		280	12	335
123		Trenton, Ord*	4,095		280	x	x
124		2 or more pays			20	x	x
125		Bethel, Mis	1,430		230	39	530
126		Bethel, Mis	1,130		160	8	205
127		Bethel, Mis	1,115		50	abd 1954; rev 1958	1
128							
129							
130		Cypress, Mis	1,005		470	25	398
			10	0	0		

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thick-ness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandon-ed	Producing end of year								
W		389424870149	02100000	02210001	28	3539	x x	L L	1012	AC AC			616263646566676869
											Mis	3,254	
									</				

TABLE 10.—

Line no.	Pool; County; Twp.—Range	Pay zone		Year of discovery	Area proved (acres)	Oil production		
		Name, age and depth	Total primary and secondary					
			During 1959			To end of 1959		
131	Beckemeyer Gas;† Clinton; 2N; 3W Bellair; Crawford, Jasper; 8N; 14W	Bethel, Mis	1,140	1956	460	25	398	
132		Cypress, Mis	1,070		10	x	x	
133				1907	1,620	x	x	
134			"500 ft.," Pen	560	x	x	x	
135			"800 ft.," Pen	815	x	x	x	
136			"900 ft.," Mis	885	x	x	x	
137			Cypress, Mis	1,210	10	x	x	
138			Renault, Mis	830		30	x	x
139		Aux Vases, Mis	800		80	x	x	
140		Ohara, Mis	860		20	x	x	
141	Belle Prairie; Hamilton; 4S; 6-7E	Aux Vases, Mis	3,250	1940	260	24	688	
142		McClosky, Mis	3,420		30	x	x	
143		2 or more pays			240	x	x	
144	Belle Prairie W; Hamilton; 4S; 5E Belle Rive; Jefferson; 3S; 4E Bellmont; Wabash; 1S; 13-14W	Harrodsburg, Mis	4,206	1959	20	0.5	0.5	
145		McClosky, Mis	3,085	1943	200	9	345	
146				1951	70	2	71	
147			Bethel, Mis	2,650		10	0	11
148		Ohara, Mis	2,840		60	2	60	
149	Beman; Lawrence; 3N; 11W			1942	500	5	257	
150								
151	Beman E; Lawrence; 3N; 10W	Aux Vases, Mis	1,805		40	x	x	
152		Ste. Genevieve, Mis	1,850		480	x	x	
153		2 or more pays						
154			Aux Vases, Mis	1,805	1947	100	0.5	108
155		Ste. Genevieve, Mis	1,860	20		x	x	
156		2 or more pays			90	x	x	
157	Bennington S; Edwards; 1N; 10E Benton; Franklin; 6S; 2-3E	McClosky, Mis	3,240	1944	20	abd 1946	10	
158				1941	2,400	583	34,668	
159			Pennsylvanian, Pen*	1,700		20	0	x
160								
161	Benton N; Franklin; 5-6S; 2E	Tar Springs, Mis	2,100		2,400	x	x	
162		Aux Vases, Mis	2,752	1959	50	x	x	
163		Ohara, Mis	2,804	1959	60	x	x	
164		2 or more pays						
165				1941	750	70	2,039	
166			Cypress, Mis		2,460	130	x	x
167			Paint Creek, Mis	2,595		150	x	x
168			Bethel, Mis	2,600		30	x	x
169			Aux Vases, Mis	2,685		100	x	x
170			Ohara, Mis	2,730		220	x	x
171	Berryville C; Edwards, Wabash; 1-2N; 14W	Rosiclare, Mis	2,775		160	x	x	
172		McClosky, Mis	2,800		360	x	x	
173		2 or more pays						
174				1943	540	15	953	
175			Ohara, Mis		2,900	120	x	x
176			Rosiclare, Mis		2,850	20	x	x
177		McClosky, Mis	2,890		420	x	x	
178		2 or more pays						
179	Bessie; Franklin; 6S; 3E	Ohara, Mis	2,895	1943	40	5	90	
180	Bible Grove N; Effingham; 6N; 7E			1947	130	1	81	
181	Bible Grove S; Clay; 5N; 7E	Cypress, Mis	2,535		50	1	x	
182		Rosiclare, Mis	2,835		40	0	x	
183		McClosky, Mis	2,875		60	0	x	
184		2 or more pays						
185				1942	50	3	112	
186		Cypress, Mis	2,500		10	0.5	7	
187		Aux Vases, Mis	2,740		40	2.5	105	
188	Blackland; Christian, Macon; 15N; 1E, 1W	Silurian, Sil	1,935	1953	730	30	388	
189	Black River; White; 4S; 13W	Clore, Mis	1,865	1952	10	2	16	
190	Blairsville W; Hamilton; 4S; 7E			1951	200	21	370	
191	Bogota; Jasper; 6N; 9E	Rosiclare, Mis*	3,345		20	x	x	
192		McClosky, Mis	3,405		200	x	x	
193		2 or more pays						
194			Rosiclare, Mis	3,090	1943	300	4	478
195		McClosky, Mis	3,110	20		1	6	
196		McClosky, Mis	3,080		280	3	472	
197	Bogota N; Jasper; 6N; 9E	McClosky, Mis	3,075	1949	10	abd 1950	0	
198	Bogota S; Jasper; 5-6N; 9E			1944	480	11	457	
199	Bone Gap C; Edwards; 1S; 10-11E, 14W			1941	1,210	55	2,023	
200		Pennsylvanian, Pen	2,110		10	0	2	

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thickness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandoned	Producing end of year								
P 102 Production W	1,971	46	3	0		x	x	S	5	A			131
		1	0	0	0	x	x	S	23	X AM	Sil Mis	2,730	132
		512	4	4	89							1,471	133
		311	0	x		32	x	S	30	AM			134
		75	0	x		x	x	S	x	AM			135
		184	0	x		37	x	S	x	AM			136
		1	0	0		x	x	S	4	AM			137
		3	1	0		x	x	S	6	AM			138
		7	3	1		x	x	S	x	AM			139
		1	0	1		x	x	L	4	A			140
		14	0	1	10					A	Dev	5,483	141
		2	0	1		37	x	S	8	AC			142
		11	0	1		37	0.12	L	6	AC			143
		1	0	1									144
		1	1	0	1			L	6		Mis	4,389	145
		5	0	0	3	39	0.50	L	6	AC	Mis	4,200	146
		4	0	0					M	Mis	3,006	147	
		1	0	0		x	x	S	7	ML			148
		3	0	0		x	x	L	7	MC			149
		23	0	0	13					A	Mis	2,000	150
510	14,177	2	0	0		x	x	S	20	AL			151
		19	0	0		38	x	L	7	AC			152
		2	0	0									153
		5	0	0	1					A	Mis	1,907	154
		1	0	0		x	x	S	20	AL			155
		3	0	0		x	x	L	7	AC			156
		1	0	0									157
		1	0	0	0	x	x	L	8	MC	Mis	3,420	158
		247	4	0	136					A	Mis	3,205	159
		0	0	0		x	x	S	9	AL			160
W		243	0	1		38	x	S	10	A			161
		5	5	0				S	15				162
		3	3	0				L	8				163
		5	3	0									164
		60	0	1	50					A	Mis	2,906	165
		13	0	0		x	x	S	17	A			166
		8	0	1		x	x	S	9	A			167
		3	0	0		38	0.15	S	20	AL			168
		3	0	0		37	0.15	S	10	A			169
		6	0	0		37	0.70	L	8	A			170
		4	0	0		38	0.15	S	6	A			171
		9	0	0		x	x	L	10	A			172
		14	0	0									173
		19	0	2	2					M	Mis	3,125	174
		5	0	0		x	x	L	6	MC			175
		1	0	0		x	x	L	12	MC			176
		12	0	2		36	x	L	10	MC			177
		1	0	0									178
		1	0	0	1	39	0.15	L	10	MC	Mis	3,457	179
		7	0	0	1					M	Mis	2,999	180
		3	0	0		36	x	S	7	M			181
		1	0	0		x	x	LS	5	ML			182
		2	0	0		x	x	L	5	M			183
		1	0	0									184
		3	0	0	2					M	Mis	2,953	185
		1	0	0		x	x	S	10	ML			186
		2	0	0		38	x	S	10	ML			187
		29	4	5	16	x	x	L	12	MU	Ord	3,780	188
		1	0	0	1	x	x	S	6	X	Mis	3,071	189
		10	0	0	3					A	Mis	3,507	190
22	361	0	0	0		x	x	L	6	AC			191
		9	0	0		x	x	L	8	AC			192
		1	0	0									193
		10	0	0	5					A	Mis	3,234	194
		1	0	0		x	x	L	4	AC			195
		9	0	0		35	x	L	7	A			196
		1	0	0	0	x	x	L	3	X	Mis	3,150	197
		23	0	0	17	35	x	L	8	MC	Mis	3,182	198
		58	0	0	27					A	Mis	3,350	199
		1	0	0		x	x	S	8	AL			200

TABLE 10.—

Line no.	Pool; County; Twp.—Range	Pay zone		Year of discovery	Area proved (acres)	Oil production	
		Name, age and depth	Total primary and secondary				
			During 1959			To end of 1959	
201		Waltersburg, Mis	2,310		150	x	x
202		Cypress, Mis	2,710		70	3	253
203		Bethel, Mis	2,880		30	x	x
204		Aux Vases, Mis	3,020		10	0	10
205		Ohara, Mis	3,040		80	x	x
206		Rosiclare, Mis	3,045		80	x	x
207		McClosky, Mis	3,200		800	x	x
208		2 or more pays					
209	Bone Gap E; Edwards; 1S; 14W			1951	40	abd 1956	13
210		Ohara, Mis	2,980		20	0	13
211		McClosky, Mis	3,050		20	0	0
212	Bone Gap W; Edwards; 1S; 10E	Ohara, Mis	3,290	1954	20	abd 1955	2
213	Boulder;† Clinton; 2-3N; 2W			1941	720	215	6,798
214		Bethel, Mis	1,190		530	x	x
215		Geneva, Dev	2,630		540	x	x
216	Boulder E;† Clinton; 3N; 1W	Devonian, Dev	2,850	1955	60	5	29
217	Bourbon C; Douglas; 15N; 7E	Rosiclare, Mis	1,600	1956	920	169	1,071
218	Bowyer; Richland; 5N; 14W	Rosiclare, Mis	2,883	1958	20	4	7
219	Boyd; Jefferson; 1S; 1-2E			1944	1,430	471	13,419
220		Bethel, Mis	2,060		1,430	x	x
221		Aux Vases, Mis	2,130		680	x	x
222		Ohara, Mis*	2,230		40	x	x
223		2 or more pays					
224	Broughton; Hamilton; 6S; 7E	McClosky, Mis	3,275	1951	20	abd 1954	6
225	Broughton S; Saline; 7S; 7E	McClosky, Mis	3,215	1951	20	abd 1952	0
226	Brown; Marion; 1N; 1E	Cypress, Mis	1,670	1910	120	x	x
227	Browns; Edwards, Wabash; 1-2S; 14W			1943	920	33	1,705
228		Tar Springs, Mis*	2,365		10	x	x
229		Cypress, Mis	2,640		290	x	x
230		Bethel, Mis	2,785		60	x	x
231		Aux Vases, Mis	2,965		10	x	x
232		Ohara, Mis	2,965		40	x	x
233		Rosiclare, Mis*	2,975		20	x	x
234		McClosky, Mis	3,000		600	x	x
235		2 or more pays					
236	Browns E; Wabash; 1-2S; 14W	Cypress, Mis	2,570	1946	630	74	2,548
237	Browns S; Edwards; 2S; 14W			1943	40	1	20
238		Bethel, Mis	2,850		20	x	x
239		Aux Vases, Mis	2,950		30	x	x
240		2 or more pays					
241	Bungay C; Hamilton; 4S; 7E			1941	3,430	305	10,632
242		Renault, Mis	3,270		180	x	x
243		Aux Vases, Mis	3,295		3,080	x	x
244		Ohara, Mis	3,335		80	x	x
245		Rosiclare, Mis	3,400		80	x	x
246		McClosky, Mis	3,425		280	x	x
247		Harrodsburg, Mis	4,190		20	x	x
248		2 or more pays					
249	Burnt Prairie S; White; 4S; 9E			1947	70	1	24
250		Aux Vases, Mis	3,330		10	0.5	7.5
251		Ohara, Mis	3,415		20	0	1
252		McClosky, Mis	3,460	1950	40	0.5	7
253	Calhoun Cen; Richland; 2N; 10E				60	abd 1952; rev & abd 1959	.5
254		Rosiclare, Mis	3,245		40	0	x
255		McClosky, Mis	3,280		20	0	x
256	Calhoun C; Richland, Wayne; 2-3N; 9-10E			1944	2,420	79	3,594
257		Ohara, Mis	3,140		x	x	x
258		Rosiclare, Mis	3,160		x	x	x
259		McClosky, Mis	3,180		x	x	x
260		2 or more pays					
261	Calhoun E; Richland; 2N; 10-11E	McClosky, Mis	3,265	1950	160	2	215
262	Calhoun N; Richland; 3N; 10E			1944	40	2	64
263		Rosiclare, Mis*	3,155		20	x	x
264		McClosky, Mis	3,170		40	x	x
265		2 or more pays					
266	Calhoun S; Wayne; 2N; 9E	Aux Vases, Mis	3,175	1953	10	abd 1953	1
267	Carlinville;† Macoupin; 9N; 7W	Unnamed, Pen	380	1909	80	x	x
268	Carlinville N;† Macoupin; 10N; 7W	Pottsville, Pen	440	1941	120	abd 1925; rev 1942	1
269	Carlinville S; Macoupin; 9N; 7W	Pennsylvanian, Pen	539	1958	10	abd 1954	0
270	Carlyle;† Clinton; 2N; 3W			1911	940	15	3,907

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thickness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandoned	Producing end of year								
P		15	0	0		35	x	S	20	A			201
		7	0	0		x	x	S	10	A			202
		3	0	0		x	x	S	14	AL			203
		1	0	0		x	x	S	9	AL			204
		2	0	0		x	x	L	5	AC			205
		3	0	0		x	x	L	5	AC			206
		24	0	0		41	0.33	L	6	AC			207
		2	0	0									208
		2	0	0	0					M	Mis	3,156	209
		1	0	0		x	x	L	10	MC			210
		1	0	0		x	x	L	5	MC			211
		1	0	0	0	x	x	L	5	X	Mis	3,388	212
		47	0	0	31					D	Tren	3,813	213
		27	0	0		36	x	S	20	D			214
		20	0	0		28	0.33	D	7	R			215
		3	0	0	2	x	x	L	5	X	Dev	2,946	216
W	x	77	1	4	69	x	x	LS	12	NC	Mis	1,715	217
		1	0	0	1	x	x	S	x	X	Mis	2,950	218
133 W, P	1,217	116	0	0	111					A	Dev	3,870	219
		74	0	0		39	0.14	S	19	A			220
W		6	0	0		39	x	S	15	A			221
		0	0	0		39	x	L	2	AC			222
		36	0	0									223
		1	0	0	0	x	x	L	5	X	Mis	3,355	224
		1	0	0	0	x	x	L	4	X	Mis	3,300	225
		12	0	0	11	x	x	S	x	N	Mis	2,036	226
		52	1	1	33					A	Mis	3,147	227
		0	0	0		x	x	S	14	AL			228
		12	1	0		35	0.18	S	13	A			229
		2	1	0		35	x	S	12	AL			230
		1	0	0		x	x	S	7	AL			231
		2	0	0		x	x	L	4	AC			232
		0	0	0		x	x	L	3	AC			233
		27	0	1		35	x	L	6	A			234
		10	1	0									235
33	745	63	4	13	23	36	x	S	13	ML	Mis	3,113	236
		4	0	0	1					N	Mis	3,095	237
		1	0	0		x	x	S	15	NL			238
		2	0	0		x	x	S	8	NL			239
		1	0	0									240
21	648	233	3	1	191					A	Mis	4,295	241
		15	0	0		x	x	S	10	AL			242
W		187	2	1		37	0.24	S	15	AL			243
		2	0	0		x	x	L	8	AC			244
		2	0	0		x	x	L	8	AC			245
		14	1	0		37	0.24	L	8	AC			246
		1	1	0				LS	10				247
		7	1	0									248
		4	0	1	1					X	Mis	3,565	249
		1	0	0		x	x	S	24	X			250
		1	0	0		x	x	L	6	X			251
		2	0	1		x	x	L	4	X			252
		3	1	1	0					M	Mis	3,355	253
		2	1	1		x	x	L	6	MC			254
		1	0	0		x	x	L	3	MC			255
81	439	101	0	10	49					A	Mis	3,990	256
		19	0	7		x	x	OL	9	A			257
		11	0	1		x	x	OL	6	A			258
		57	0	4		38	0.15	OL	10	A			259
W		14	0	2									260
		5	0	0	5	39	x	L	5	MC	Mis	3,380	261
		2	0	0	1					A	Mis	3,280	262
		0	0	0		x	x	LS	10	A			263
		1	0	0		x	x	OL	11	A			264
		1	0	0									265
		1	0	0	0	x	x	L	5	X	Mis	3,350	266
		8	0	0	3	28	x	S	x	A	Mis	1,380	267
		6	0	0	0	20	0.35	S	10	X	Tren	1,970	268
		1	0	0	1	x	x	S	x	X	Pen	625	269
		186	0	0	28					A	St. P	4,120	270

TABLE 10.—

Line no.	Pool; County; Twp.-Range	Pay zone		Year of discovery	Area proved (acres)	Oil production	
		Name, age and depth				Total primary and secondary	
						During 1959	To end of 1959
271	Carlyle N; Clinton; 3N; 3W Carlyle S; Clinton; 1N; 3W Carmi; White; 5S; 9E	Golconda, Mis	900		30	x	x
272		Carlyle (Cypress), Mis	1,035		940	x	x
273		2 or more pays					
274		Bethel, Mis	1,150	1950	470	31	542
275		Cypress, Mis	1,075	1951	20	abd 1953	2
276				1939	210	66	144
277		Pennsylvanian, Pen	1,210		10	0	1
278		Cypress, Mis	2,800		60	x	x
279		Aux Vases, Mis	3,145		20	x	x
280		McClosky, Mis	3,150		120	x	x
281	Carmi N; White; 5S; 9E			1942	110	9	231
282		Cypress, Mis	2,940		20	x	x
283		Paint Creek, Mis*	3,080		10	x	x
284		Aux Vases, Mis	3,270		100	x	x
285		2 or more pays					
286		Casey;† Clark; 10-11N; 14W			1906	2,270	x
287		Upper Gas, Pen	265		200	see Clark Co. Div. for	
288		Lower Gas, Pen	300		400	x	x
289		Casey, Pen	445		1,560	x	x
290		Carper, Mis	1,300		180	x	x
291	Centerville; White; 4S; 9E			1940	200	7	489
292		Aux Vases, Mis*	3,240		10	0	x
293		Ohara, Mis	3,310		100	x	x
294		Rosiclare, Mis*	x		20	x	x
295		McClosky, Mis	3,370		120	x	x
296		2 or more pays					
297	Centerville E; White; 3-4S; 9-10E			1941	1,350	149	4,892
298		Palestine, Mis	2,225		20	x	x
299		Tar Springs, Mis	2,500		400	x	x
300		Hardinsburg, Mis	2,615		10	x	x
301		Cypress, Mis	2,915		390	x	x
302		Paint Creek, Mis*	2,980		20	x	x
303		Bethel, Mis	2,990		180	x	x
304		Aux Vases, Mis	3,075		340	x	x
305		Ohara, Mis	3,175		40	x	x
306		Rosiclare, Mis*	3,185		20	x	x
307		McClosky, Mis	3,230		240	x	x
308		2 or more pays					
309	Centerville N; White; 3S; 10E	Bethel, Mis	2,990	1947	10	abd 1948	0
310	Centerville NE; White; 3S; 10E	Bethel, Mis	3,055	1955	10	0.1 abd 1959	6
311	Centralia; Clinton, Marion; 1-2N; 1E, 1W			1937	3,370	2,014	47,492
312		Petro, Pen	765	1958	30	x	x
313		Cypress, Mis	1,200		500	x	x
314		Bethel, Mis	1,355		1,400	x	x
315		Devonian, Dev	2,870		2,500	x	x
316		Trenton, Ord	3,930		1,400	x	x
317		2 or more pays					
318	Centralia W; Clinton; 1N; 1W	Bethel, Mis	1,440	1940	90	3	394
319	Chesterville; Douglas; 15N; 7E	Rosiclare, Mis	1,780	1956	100	3	27
320	Chesterville E; Douglas; 14-15N; 7-8E	Rosiclare, Mis	1,720	1957	400	38	666
321	Clark County Division; Clark, Coles, Cumberland, Edgar, Jasper				24,750	1,557	75,288
322	Clarksburg; Shelby; 10N; 4E	Bethel, Mis	1,770	1946	30	Total of lines 133, 286, 2	30
323	Clay City C; Clay, Jasper, Richland, Wayne; 1-7N, 1-2S; 6-10E			1937	86,630	7,198	211,962
324		Waltersburg, Mis	2,175		10	x	x
325		Tar Springs, Mis	2,560		160	x	x
326		Cypress, Mis	2,635		5,900	x	x
327		Bethel, Mis	2,800		110	x	x
328		Aux Vases, Mis	2,940		15,580	x	x
329		Ohara, Mis	3,020		x	x	x
330		Rosiclare, Mis	3,030		x	x	x
331		McClosky, Mis	3,050		x	x	x
332		St. Louis, Mis	3,025	1949	320	x	x
333		Salem, Mis	3,590		1,660	x	x
334		Warsaw, Mis*	3,600		10	x	x
335		Devonian, Dev*	4,350	1949	20	0	x
336		2 or more pays					
337	Clay City W; Clay; 2N; 7E			1941	560	70	1,908
338		Cypress, Mis	2,700		10	0	20
339		Aux Vases, Mis	2,950		80	x	x
340		McClosky, Mis	3,065		540	x	x

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thickness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandoned	Producing end of year								
4	4	5	0	0		x	x	L	10	AC			271
		180	0	0		35	0.26	S	20	AL			272
		1	0	0									273
		41	0	0	34	36	x	S	6	AL	Dev	2,558	274
		2	0	0	0	x	x	S	4	X	Mis	1,194	275
		16	3	0	8					M	Mis	3,340	276
		1	0	0		x	x	S	10	ML			277
		7	1	0		x	x	S	15	ML			278
		2	0	0		x	x	S	8	ML			279
		6	2	0		x	x	OL	6	MC			280
29 production	420	6	0	0	4					A	Mis	3,452	281
		1	0	0		38	x	S	13	Af			282
		0	0	0		x	x	S	12	Af			283
		4	0	0		37	0.14	S	14	Af			284
		1	0	0									285
		459	2	0	308					AM	Dev	1,717	286
		42	0	0		32	x	S	x	AM			287
		83	0	0		30	x	S	x	AM			288
		328	0	0		32	x	S	10	AM			289
		16	2	0		x	x	S	50	AM			290
67	258	10	0	0	4					N	Mis	3,919	291
		0	0	0		x	x	S	6	NL			292
		4	0	0		x	x	L	10	NC			293
		0	0	0		x	x	L	x	NC			294
		5	0	0		40	0.17	OL	4	NC			295
		1	0	0									296
		122	0	0	104					A	Mis	3,427	297
		2	0	0		x	x	S	3	ALf			298
		28	0	0		37	0.20	S	24	ALf			299
		1	0	0		x	x	S	22	ALf			300
W		29	0	0		36	x	S	6	ALf			301
		0	0	0		x	x	S	40	ALf			302
		9	0	0		36	x	S	20	ALf			303
		27	0	0		36	x	S	21	ALf			304
		1	0	0		36	x	OL	5	ACf			305
		0	0	0		x	x	LS	6	ACf			306
		10	0	0		37	x	OL	7	ACf			307
		15	0	0									308
		1	0	0	0	x	x	S	13	ML	Mis	3,290	309
		1	0	1	0	x	x	S	14	X	Mis	3,407	310
1,785	6,317	1,001	2	5	423					A	Ord	4,170	311
		3	0	0		x	x	S	x	A			312
		50	0	1		36	0.20	S	12	A			313
		566	0	3		37	0.17	S	20	A			314
		319	0	1		40	0.38	L	9	A			315
		59	0	0		40	x	L	22	A			316
		2	0	0									317
		9	0	0	2	38	0.17	S	9	N	Dev	3,021	318
		5	0	0	2	x	x	LS	8	ML	Mis	1,829	319
		40	0	1	38	x	x	S	10	NC	Mis	1,785	320
1,200	17,268	5,176	46	24	1,642						St. P	3,411	321
		3	0	0	2	34	x	S	6	A	Dev	3,206	322
		4,554	92	81	3,229					A	St. P	7,205	323
		1	0	0		x	x	S	6	AL			324
		8	0	0		37	x	S	15	AL			325
		427	6	3		34	x	S	15	AL			326
		4	1	0		x	x	S	15	AL			327
		1,375	42	30		39	x	S	15	AL			328
		121	4	2		38	x	OL	5	AC			329
		331	22	12		38	x	LS	8	AC			330
W	56	2,084	25	40		40	x	OL	10	AC			331
		13	4	1		x	x	L	3	A			332
		74	5	1		x	x	L	10	A			333
		0	0	0		x	x	L	17	A			334
		0	0	0		x	x	L	10	A			335
		278	15	6									336
		22	0	0	15					A	Dev	4,973	337
		1	0	0		x	x	S	10	AL			338
		1	0	0		x	x	S	7	AL			339
		20	0	0		39	0.12	OL	15	AL			340

TABLE 10.—

Line no.	Pool; County; Twp.—Range	Pay zone		Year of discovery	Area proved (acres)	Oil production	
		Name, age and depth	Total primary and secondary				
			During 1959			To end of 1959	
341	Clifford; Williamson; 8S; 1E			1957	30	1	8
342		Aux Vases, Mis	2,380		20	x	x
343		Rosiclare, Mis*	2,470		20	x	x
344		McClosky, Mis*	2,540		20	x	x
345		2 or more pays					
346	Coil; Wayne; 1S; 5E			1942	490	35	1,483
347		Aux Vases, Mis	2,700		470	35	1,482
348		McClosky, Mis	3,065		20	0	1
349	Coil N; Wayne; 1N, 1S; 5E	Aux Vases, Mis	2,841	1958	40	18	19
350	Coil W; Jefferson; 1S; 4E			1942	370	16	642
351		Aux Vases, Mis	2,720		130	x	x
352		Ohara, Mis	2,790		200	x	x
353		Rosiclare, Mis*	2,805		40	x	x
354		McClosky, Mis	2,880		240	x	x
355		2 or more pays					
356	Collinsville; Madison; 3N; 8W	Silurian, Sil	1,305	1909	40	abd 1921	1
357	Colmar-Plymouth; Hancock, McDonough; 4-5N; 4-5W						
358	Concord C; White; 6S; 10E	Hoing, Dev	450	1914	2,550	59	4,260
359		Tar Springs, Mis	2,270	1942	1,900	307	5,573
360		Hardinsburg, Mis	2,510		210	x	x
					310	x	x
361		Cypress, Mis	2,625		230		x
362		Aux Vases, Mis	2,905		520	x	x
363		Ohara, Mis	2,930		40	x	x
364		Rosiclare, Mis	3,035		60	x	x
365		McClosky, Mis	2,990		1,120	x	x
366		2 or more pays					
367	Concord E C; White; 6-7S; 10E			1942	380	62	569
368		Waltersburg, Mis	2,140		30	x	x
369		Tar Springs, Mis	2,175		60	x	x
370		Cypress, Mis	2,540		180	x	x
371		Renault, Mis	2,800		20	x	x
372		Aux Vases, Mis	2,825		60	x	x
373		Ohara, Mis	2,895		40	x	x
374		Rosiclare, Mis	2,895		100	x	x
375		McClosky, Mis	2,965		30	x	x
376		2 or more pays					
377	Cooks Mills C; † Coles, Douglas; 13-14N; 7-8E			1941	3,090	133	2,130
378		Cypress, Mis	1,600		10	x	x
379		Aux Vases, Mis	1,765		20	x	x
380		Rosiclare, Mis	1,800		3,070	x	x
381		McClosky, Mis	1,840		20	x	x
382		2 or more pays					
383	Cordes, Washington; 3S; 3W			1939	1,310	243	8,029
384	Corinth; Williamson; 8S; 4E	Bethel, Mis	1,260	1957	120	18	122
385		Aux Vases, Mis	2,885		90	x	x
386		Ohara, Mis	2,929		20	x	x
387		Rosiclare, Mis	2,985		40	x	x
388		2 or more pays					
389	Corinth E; Williamson; 8S; 4E	McClosky, Mis	3,035	1957	20	1	10
390	Corinth N; Williamson; 8S; 4E	Aux Vases, Mis	2,935	1957	10	1	3
391	Cottage Grove; Saline; 9S; 7E	Ohara, Mis	2,770	1955	20	1	10
392	Coulterville N; Washington; 3S; 5W	Silurian, Sil	2,290	1958	80	11	16
393	Covington S; Wayne; 2S; 6E	McClosky, Mis	3,310	1943	320	0.1	171
394	Craig; Perry; 4S; 4W	Trenton, Ord	3,650	1948	20	abd 1951	2
395	Cravat; Jefferson; 1S; 1E	Bethel, Mis	2,070	1939	120	6	350
396	Cravat W; Jefferson; 1S; 1E	Pennsylvanian, Pen	1,045	1956	110	18	25
397	Crossville; White; 4S; 10E			1946	130	abd 1952; rev 1956; abd 1958	16
398		Bethel, Mis	2,880		30	0	x
399		Aux Vases, Mis	3,030		30	0	x
400		Ohara, Mis	3,100		20	0	x
401		McClosky, Mis	3,120		60	0	x
402		2 or more pays					
403	Crossville W; White; 4S; 10E			1952	210	44	237
404						abd 1953; rev 1956	
405		Aux Vases, Mis	3,030		90	x	x
406		Ohara, Mis	3,110	1958	20	x	x
407		Rosiclare, Mis	3,102	1958	10	x	x
408		McClosky, Mis	3,185		140	x	x
409		2 or more pays					
410	Dahlgren; Hamilton; 3S; 5E			1941	700	3	1,189
		McClosky, Mis	3,300		700	3	1,187

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

## OIL PRODUCTION

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(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thick-ness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandon-ed	Producing end of year								
		2	0	0	2						Mis	2,625	341
		2	0	0		x	x	S	7	X			342
		1	0	0		x	x	L	7	X			343
		1	0	0		x	x		5	X			344
		1	0	0									345
		18	1	0	13			S	10	A	Mis	3,250	346
		17	1	0		39	0.12	OL	15	AC			347
		4	0	0	4	x	x	S	x	X	Mis	2,942	348
		20	0	0	12	x	x			A	Mis	3,022	349
													350
		7	0	0		x	x	S	15	AL			351
		1	0	0		x	x	L	7	AC			352
		0	0	0		x	x	L	x	AC			353
		6	0	0		x	x	L	8	AC			354
		6	0	0									355
		6	0	0	0	x	x	L	20	ML	St. P	2,177	356
22		502	1	0	204	38	0.38	S	21	AL	St. P	815	357
W	283	157	1	10	136	36	x	S	11	A	Mis	3,138	358
W		21	0	0		x	x	S	7	AL			359
W		28	0	0		x	x	S	11	A			360
		15	0	1		x	x	S	10	AL			361
		31	1	5		36	0.15	S	14	AL			362
		2	0	0		x	x	L	8	AC			363
		2	0	0		37	x	L	8	AC			364
		44	0	6		37	x	L	10	AC			365
		14	0	2									366
		37	0	1	25	37	x	S	10	A	Mis	3,125	367
		3	0	0		x	x	S	4	A			368
		5	0	0		x	x	S	4	A			369
		16	0	1		x	x	S	6	A			370
		2	0	0		x	x	L	6	A			371
		3	0	0		x	x	S	12	A			372
		2	0	0		x	x	L	6	AC			373
		2	0	0		x	x	S	5	AC			374
		1	0	0		x	x	L	2	AC			375
		5	0	0									376
		229	3	10	205					A	Dev	3,028	377
		1	0	0		x	x	S	20	A			378
		1	0	0		x	x	S	15	A			379
		225	3	10		36	x	S	9	A			380
191	2,536	1	0	0		x	x	L	4	A			381
		1	0	0									382
		154	0	1	97	36	0.19	S	14	A	Dev	2,887	383
		10	0	0	10	x	x	S	10	X	Mis	3,150	384
		9	0	0		x	x	L	10	X			385
		1	0	0		x	x	L	x	X			386
		2	0	0		x	x	L	10	X			387
		3	0	0									388
		1	0	0	1	x	x	L	10	X	Mis	3,113	389
		1	0	0	1	x	x	S	16	X	Mis	3,180	390
0	x	1	0	0	1	x	x	L	x	X	Mis	2,977	391
		4	2	1	3	x	x	L	x	X	Ord	3,204	392
		8	0	2	2	39	0.18	L	5	AC	Mis	3,397	393
		1	0	0	0	35	x	L	20	A	Ord	3,735	394
		11	0	0	7	35	0.23	S	10	A	Mis	2,363	395
		11	5	0	11	x	x	S	10	X	Mis	2,320	396
		11	0	0	0					M	Mis	3,251	397
		3	0	0		x	x	S	9	ML			398
		2	0	0		x	x	S	20	ML			399
		1	0	0		x	x	L	3	MC			400
		4	0	0		x	x	L	5	MC			401
		1	0	0									402
		15	2	0	13					M	Mis	3,247	403
		9	2	0		x	x	S	8	ML			404
		1	0	0		x	x	L	x	M			405
		1	0	0		x	x	L	x	M			406
		7	0	0		x	x	L	x	MC			407
		2	0	0									408
		44	0	0	2					A	Dev	5,299	409
		43	0	0		39	0.16	L	11	A			410

TABLE 10.—

Line no.	Pool; County; Twp.-Range	Pay zone		Year of discovery	Area proved (acres)	Oil production			
		Name, age and depth	Total primary and secondary						
			During 1959			To end of 1959			
411	Dale C; Franklin, Hamilton, Saline; 5-7S; 4-7E	Warsaw, Mis	4,110	1940	20	0	2		
412									
413		Tar Springs, Mis	2,430		17,700	1,961	65,838		
414		Hardinsburg, Mis*	2,480		400	x	x		
415		Cypress, Mis	2,700		100	x	x		
416		Paint Creek, Mis	2,950		920	x	x		
417		Bethel, Mis	2,975		230	x	x		
418		Aux Vases, Mis	3,150		2,110	x	x		
419		Ohara, Mis	3,110		12,890	x	x		
420		Rosiclare, Mis	3,130		2,120	x	x		
421	Decatur; Macon; 16-17N; 2E	McClosky, Mis	3,150	1953	2,480	x	x		
422		2 or more pays							
423		Silurian, Sil	2,000		120	0.5	15		
424		Silurian, Sil	2,200		20	abd 1959			
425		Aux Vases, Mis	2,810		50	abd 1955	0.1		
426		Divide; Jefferson; 1S; 3-4E			1943	37	93		
427			Ohara, Mis*		2,705	420	37	619	
428			Rosiclare, Mis*		2,770	20	x	x	
429			McClosky, Mis		2,750	20	x	x	
430		St. Louis, Mis	2,850		340	x	x		
431	Divide E; Jefferson; 1S; 4E	2 or more pays		1947	140	x	x		
432									
433		Aux Vases, Mis	2,620		700	65	1,527		
434		Rosiclare, Mis	2,700		110	x	x		
435		McClosky, Mis	2,750		60	x	x		
436		2 or more pays			600	x	x		
437		Divide S; Jefferson; 2S; 3E	McClosky, Mis		2,880	1948	180	22	216
438		Divide W; Jefferson; 1S; 3E				1944	1,760	216	4,035
439			Ohara, Mis		2,680		120	x	x
440		Rosiclare, Mis	2,700		320	x	x		
441	Dix S; Jefferson; 1S; 2E Dubois Cen; Washington; 3S; 1W	McClosky, Mis	2,750	1941	1,560	x	x		
442		St. Louis, Mis	2,810		100	x	x		
443		2 or more pays							
444		Bethel, Mis	1,950		20	abd 1946	13		
445					1954	90	2	54	
446			Bethel, Mis		1,335	60	x	x	
447			Rosiclare, Mis		1,530	60	x	x	
448			2 or more pays						
449		Dubois C;† Washington; 3S; 1-2W				1939	1,170	81	1,044
450		Cypress, Mis	1,230		820	x	x		
451	Dudley;† Edgar; 13-14N; 13W	Bethel, Mis	1,325	1948	500	x	x		
452		2 or more pays							
453									
454		Upper Dudley, Pen	310		580	57	817		
455		Lower Dudley, Pen	410		260	x	x		
456		Dudleyville E; Bond; 4-5N; 2-3W	Devonian, Dev		560	x	x		
457		Dupo; St. Clair; 1N, 1S; 10W	Trenton, Ord		2,370	40	0.2	2.7	
458		Eberle; Effingham; 6N; 6E			700	1954	1,000	8	2,851
459						1928			
460		Cypress, Mis	2,475	1947	130	6	96		
	Rosiclare, Mis	2,680	10		x	x			
					40	x	x		
461	Edinburg; Christian; 14N; 3W Edinburg S; Christian; 14N; 3W Edinburg W; Christian, Sangamon; 14N; 3-4W	McClosky, Mis	2,820	1949	80	x	x		
462		Cedar Valley, Dev	1,810		20	abd 1951	0		
463		Hibbard, Dev	1,795		40	0.3	4		
464					1954				
465		Devonian, Dev	1,660		840	144	1,218		
466		Silurian, Sil	1,690		60	x	x		
467		2 or more pays			820	x	x		
468		Elba; Gallatin; 8S; 8E				1955	180	2	25
469			Cypress, Mis		2,617	1958	10	x	x
470		Bethel, Mis	2,660		50		x	x	
471	Elbridge; Edgar; 12-13N; 11W	Renault, Mis*	2,770	1949	10	x	x		
472		Aux Vases, Mis	2,780		80	x	x		
473		Ohara, Mis	2,820		80	x	x		
474		2 or more pays							
475									
476		Pennsylvanian, Pen	760		360	30	1,380		
477		Fredonia, Mis	950		20	x	x		
478		Devonian, Dev*	1,950		360	x	x		
479		Eldorado C;† Saline; 8S; 6-7E				1941	20	0	x
480		Palestine, Mis	1,920		2,340	273	6,175		
					220	x			

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

(Continued)

(M bbls.)		Number of wells					Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959					Gravity API	Sulfur percent	Character	Av. thickness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandoned	Producing end of year									
		1	0	0		x	x	L	15	A				411
210	805	1,379	42	14	1,085									412
		25	0	0		x	x	S	25	A	Dev	5,345		413
		0	0	0		x	x	S	10	A				414
		51	2	0		x	x	S	15	A				415
W		10	0	0		36	x	S	18	A				416
W		111	1	0		39	0.19	S	18	A				417
W		916	32	12		38	0.15	S	20	A				418
		56	0	1		39	0.22	L	10	A				419
		12	1	0		38	x	LS	7	A				420
		71	11	1		40	0.19	L	7	A				421
		135	4	0										422
		6	0	1	0	x	x	L	7	MU	Ord	2,800		423
		1	0	0	0	x	x	L	10	MU	Sil	2,240		424
		5	1	0	5	x	x	S	20		Mis	2,875		425
		21	1	0	15							2,970		426
		0	0	0		x	x	L	11	AC				427
		0	0	0		x	x	LS	5	AC				428
		13	1	0		39	x	L	6	AC				429
		5	0	0		x	x	L	7	AC				430
20	74	3	0	0										431
		41	0	0	29							2,918		432
		9	0	0		38	x	S	10	AL	Mis			433
W		3	0	0		39	x	L	10	AL				434
		28	0	0		38	x	L	5	AC				435
		1	0	0										436
		9	4	1	6	35	x	L	5	X	Mis	2,981		437
		95	9	1	80							4,700		438
		1	0	0		x	x	L	10	AC	Dev :			439
		11	0	0		x	x	LS	6	AC				440
		68	9	1		37	0.21	L	6	AC				441
		5	0	0		x	x	L	7	AC				442
		12	0	0										443
		2	0	0	0	x	x	S	8	N	Mis	2,283		444
		7	1	1	4							3,100		445
		6	2	0		x	x	S	12	X	Dev			446
		3	0	1		x	x	L	8	X				447
x	x	2	1	0										448
W		105	2	3	92							4,217		449
		69	2	2		x	x	S	10	AL	Ord			450
		34	0	1		32	0.26	S	10	AL				451
		2	0	0										452
		74	0	0	62							2,997		453
		20	0	0		36	x	S	20	ML	St. P			454
		54	0	0		25	x	S	50	ML				455
		2	0	0	1	x	x	L	5	X	Ord	3,397		456
		320	0	0	30	33	0.70	L	50	A	Ord	1,800		457
		7	0	1	5							2,882		458
		1	0	0		36	x	S	10	NL	Mis			459
		2	0	1		x	x	LS	5	NC				460
		4	0	0		36	x	L	7	N				461
		1	0	0	0	x	x	L	2	A	Dev	1,853		462
		2	0	0	2	x	x	LS	13	X	Sil	1,902		463
		41	6	1	37							2,285		464
		3	0	0		x	x	S	6	A	Ord			465
		40	6	1		x	x	L	8	A				466
		2	0	0										467
		13	3	8	1							2,991		468
		1	0	2		x	x	S	x	X	Mis			469
		3	0	3		x	x	S	10	X				470
		0	0	0		x	x	L	3	X				471
		5	3	3		x	x	S	5	X				472
		3	0	3		x	x	L	11	X				473
		3	0	3										474
		38	0	0	24							2,093		475
		2	0	0		x	x	S	3	D	Dev			476
		36	0	0		x	x	L	3	D				477
0.4	0.4	221	1	5	200	x	x	L	20	D				478
		19	0	2		x	x	S	20	AL	Mis	3,606		479
														480

TABLE 10.--

Line no.	Pool; County; Twp.-Range	Pay zone		Year of discovery	Area proved (acres)	Oil production	
		Name, age and depth	Total primary and secondary				
			During 1959			To end of 1959	
481		Waltersburg, Mis	2,125		1,340	x	x
482		Tar Springs, Mis	2,200		140	x	x
483		Hardinsburg, Mis	2,350		130	x	x
484		Cypress, Mis	2,575		70	x	x
485		Paint Creek, Mis	2,680		60	x	x
486		Aux Vases, Mis	2,900		500	x	x
487		Ohara, Mis	2,900		40	x	x
488		Rosiclare, Mis*	2,900		20	x	x
489		McClosky, Mis	2,975		40	x	x
490		2 or more pays					
491	Eldorado E;† Saline; 8S; 7E			1953	260	18	258
492		Palestine, Mis	1,915		10	x	x
493		Tar Springs, Mis	2,190		20	x	x
494		Cypress, Mis	2,515		30	x	x
495		Aux Vases, Mis	2,885		190	x	x
496		Rosiclare, Mis	2,975		20	0	x
497		2 or more pays					
498	Eldorado W; Saline; 8S; 6E			1955	50	7	38
499		Palestine; Mis	1,940		20	x	x
500		Renault, Mis	2,910		20	x	x
501		Aux Vases, Mis	2,960		20	x	x
502		2 or more pays		1955			
503	Elk Prairie; Jefferson; 4S; 2E	McClosky, Mis	2,735	1938	20	abd 1940	1
504	Elkton; Washington; 2S; 4W	Bailey, Dev	2,340	1955	40	0	3
505	Elkville; Jackson; 7S; 1W	Bethel, Mis	2,000	1941	10	0	4
506	Ellery E; Edwards; 2S; 10E			1952	340	91	653
507		Aux Vases, Mis	3,180		160	x	x
508		Ohara, Mis	3,255		180	x	x
509		Rosiclare, Mis	3,255		60	x	x
510	Ellery N; Edwards; 2S; 10E			1942	140	3	26
					abd 1943; rev & abd 1951;		
511		Bethel, Mis	3,100		20	x	x
512		Aux Vases, Mis*	3,230		10	x	x
513		Rosiclare, Mis	3,345		80	x	x
514		McClosky, Mis	3,420		40	0	3
515		2 or more pays					
516	Ellery S; Edwards; 2-3S; 10E			1943	200	2	172
517		Aux Vases, Mis	3,200		40	abd 1952; rev 1953; abd	
518		McClosky, Mis	3,300		160	2	34
519	Elliottstown; Effingham; 7N; 7E	Rosiclare, Mis	2,730	1947	20	abd 1951	138
520	Elliottstown E; Effingham; 7N; 7E	Cypress, Mis	2,485	1954	10	abd 1956	14
							3
521	Elliottstown N; Effingham; 7N; 7E	Cypress, Mis	2,430	1953	20	abd 1958	11
522	Enfield; White; 5S; 8E			1950	310	79	479
						abd 1951; rev 1952	
523		Aux Vases, Mis	3,250		150	x	x
524		Ohara, Mis	3,310		60	x	x
525		McClosky, Mis	3,385		100	x	x
526	Evers; Effingham; 8N; 7E			1948	70	6	75
					abd 1949; rev 1953		
527		Rosiclare, Mis	2,610		60	6	74
528		McClosky, Mis	2,660		10	0	1
529	Evers S; Effingham; 7N; 7E	Rosiclare, Mis	2,650	1948	10	abd 1951	2
530	Ewing; Franklin; 5S; 3E			1944	150	3	502
531		Aux Vases, Mis	2,835		10	0.5	56
532		McClosky, Mis	2,970		140	2.5	446
533	Ewing E; Franklin; 5S; 3E	Ohara, Mis	3,010	1956	20	x	x
534	Exchange; Marion; 1N; 3E			1943	80	1	62
535		Ohara, Mis*	2,695		40	x	x
536		McClosky, Mis	2,730		80	x	x
537	Exchange E; Marion; 1N; 4E			1955	320	32	333
538		Ohara, Mis	2,775		20	x	x
539		Rosiclare, Mis	2,780		180	x	x
540		McClosky, Mis	2,840		180	x	x
541		St. Louis, Mis	2,940		20	x	x
542		2 or more pays					
543	Exchange N; Marion; 1N; 3-4E	McClosky, Mis	2,715	1951	60	0.1	8
					abd 1952; rev 1955; abd 1959		
544	Exchange W; Marion; 1N; 3E	McClosky, Mis	2,650	1957	40	2	8
545	Fairman; Clinton; Marion; 3N; 1E, 1W			1939	670	52	1,756
546		Bethel, Mis	1,435	1939	480	13	1,652
547		Trenton, Ord	3,950	1957	300	39	104
548	Fitzgerrell; Jefferson; 4S; 1E			1944	10	abd 1952	16
549		Bethel, Mis	2,760		10	0	x
550		Aux Vases, Mis*	2,800		10	0	x

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thick-ness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandon-ed	Producing end of year								
W		131	0	0		x	x	S	25	AL			481
		10	1	1		x	x	AL	15	AL			482
		8	0	0		x	x	S	8	AL			483
		4	0	0		x	x	AL	8	AL			484
		2	0	0		x	x	S	18	AL			485
		35	0	1		x	x	S	12	AL			486
		1	0	0		x	x	L	5	AC			487
		0	0	0		x	x	LS	4	AC			488
		2	0	1		34	0.14	L	5	AC			489
		15	0	0									490
		20	0	0	14					A	Mis	3,102	491
		1	0	0		x	x	S	10	AL			492
		1	0	0		x	x	S	10	AL			493
		2	0	0		x	x	S	20	AL			494
		14	0	0		x	x	S	6	AL			495
		1	0	0		x	x	L	4	AC			496
		1	0	0									497
		5	0	1	3					X	Mis	3,138	498
		2	0	0		x	x	S	18	X			499
		2	0	1		x	x	L	6	X			500
		2	0	1									
		1	0	0		x	x	L	6	X			501
		1	0	0									502
		1	0	0	0	x	x	L	7	X	Mis	2,956	503
		2	0	0	1	x	x	L	30	X	Dev	2,485	504
		1	0	0	0	36	0.22	S	10	X	Mis	2,387	505
		25	1	2	23					M	Mis	3,390	506
		13	0	1		x	x	S	35	ML			507
		11	0	0		x	x	L	6	MC			508
		3	1	1		x	x	L	4	MC			509
rev 1954		6	0	0	1					M	Mis	3,496	510
		1	0	0		x	x	S	35	ML			511
		0	0	0		x	x	S	12	ML			512
		3	0	0		x	x	S	8	ML			513
		1	0	0		37	0.19	L	7	MC			514
		1	0	0									515
		8	0	3	0					M	Mis	3,434	516
1959		4	0	3		x	x	S	15	ML			517
		4	0	0		38		L	9	MC			518
		1	0	0	0	x	x	S	8	HL	Mis	2,884	519
		1	0	0	0	x	x	S	5	HL	Mis	2,867	520
		2	0	0	0	x	x	S	4	HL	Mis	2,865	521
		19	2	0	17								
		11	1	0		x	x	S	10	A	Mis	4,259	522
		3	1	0		x	x	L	4	AL			523
		5	0	0		x	x	L	8	AC			524
										AC			525
		4	0	0	3					A	Mis	2,808	526
		3	0	0		x	x	L	7	AL			527
		1	0	0		x	x	AC	4	AC			528
		1	0	0	0	x	x	LS	8	AC	Mis	2,771	529
		8	0	0	3					A	Mis	3,094	530
		1	0	0		37	x	S	8	AL			531
		7	0	0		x	x	L	7	A			532
		1	0	0	1	x	x	L	10	X			533
		2	0	0	1					M	Mis	2,869	534
		0	0	0		x	x	L	10	MC			535
		2	0	0		x	x	L	8	MC			536
		16	0	0	14					X	Mis	3,006	537
		1	0	0		x	x	L	14	X			538
		7	0	0		x	x	S	11	X			539
		6	0	0		x	x	L	4	X			540
		1	0	0		x	x	L	8	X			541
		1	0	0									542
		3	0	1	0	x	x	L	6	MC	Mis	2,831	543
		2	0	0	2	x	x	L	6		Mis	2,779	544
		58	0	3	35					A	Ord	4,100	545
		44	0	2		37	0.27	S	10	A			546
		14	0	1		x	x	L	20	A			547
		1	0	0	0					X	Mis	3,012	548
		1	0	0		x	x	S	5	X			549
		0	0	0		x	x	S	x	X			550

TABLE 10.—

Line no.	Pool; County; Twp.—Range	Pay zone		Year of discovery	Area proved (acres)	Oil production	
		Name, age and depth				Total primary and secondary	
						During 1959	To end of 1959
551	Flora S; Clay; 2N; 6E	McClosky, Mis	2,985	1946	100	4	162
552	Francis Mills; Saline; 7S; 7E	Cypress, Mis	2,675	1952	10	5	68
553	Francis Mills S; Saline; 7S; 7E	Ohara, Mis	3,010	1955	20	abd 1957	6
554	Freeburg;† St. Clair; 1-2S; 7W	Cypress, Mis	380	1955	20	x	x
555	Friendsville Cen; Wabash; 1N; 13W	Bethel, Mis	2,330	1946	50	0	31
556	Friendsville N; Wabash; 1N; 12-13W			1946	130	2	210
557		Biehl, Pen	1,620	1946	120	x	x
558		Bethel, Mis	2,308	1959	10	x	x
559	Frogtown; Clinton; 2N; 3-4W	Carlyle (Cypress), Mis	950	1918	300	abd 1933; rev 1949	x
560	Frogtown N; Clinton; 2-3N; 3-4W			1951	580	63	1,702
561		St. Louis, Mis	1,200	1951	100	x	x
562		Devonian-Silurian	2,250		580	x	x
563	Gards Point C; Wabash; 1N; 14W	Ohara, Mis	2,870	1951	820	91	599
564	Gays; Moultrie; 12N; 6E			1946	100	3	38
565		Aux Vases, Mis	1,970		abd 1950; rev 1955		
566		Devonian, Dev*	3,205		100	x	x
567		2 or more pays			20	x	x
568	Germantown E; Clinton; 1-2N; 4W	Silurian, Sil	2,350	1956	600	170	1,146
569	Gila; Jasper; 7-8N; 9E	McClosky, Mis	2,850	1957	540	116	465
570	Gillespie-Wyen; Macoupin; 8N; 6W	Unnamed, Pen	650	1915	45	x	x
571	Glenarm; Sangamon; 14N; 5W	Silurian, Sil	1,680	1955	20	abd 1957; rev 1959	1
572	Goldengate C; Edwards, Wayne, White; 2-4S; 9-10E			1938	7,200	422	11,541
573		Bethel, Mis	3,110		280	x	x
574		Aux Vases, Mis	3,180		2,110	x	x
575		Ohara, Mis	3,250		1,540	x	x
576		Rosiclare, Mis	3,275		1,920	x	x
577		McClosky, Mis	3,310		3,040	x	x
578		St. Louis, Mis	3,430		40	x	x
579		2 or more pays					
580	Goldengate E; Wayne; 3S; 9E	Ohara, Mis	3,290	1951	20	abd 1957	5
581	Goldengate N C; Wayne; 1-2S; 8-9E			1945	640	47	440
582		Bethel, Mis*	3,095		10	x	x
583		Aux Vases, Mis	3,235		270	x	x
584		Ohara, Mis*	3,300		120	x	x
585		Rosiclare, Mis	3,325		180	x	x
586		McClosky, Mis	3,350		200	x	x
587		2 or more pays					
588	Grandview;† Edgar; 12-13N; 13W	Pennsylvanian, Pen	560	1945	60	0	4
589	Grayson; Saline; 8S; 7E			1957	40	2	10
590		Cypress, Mis*	2,515		10	x	x
591		McClosky, Mis	2,920		40	x	x
592		2 or more pays					
593	Greenville;† Bond; 5N; 3W	Lingle, Dev	2,240	1957	20	abd 1958	0
594	Half Moon; Wayne; 1S; 9E			1947	1,210	87	2,114
595		Aux Vases, Mis	3,190		20	x	x
596		Ohara, Mis	3,280		740	x	x
597		Rosiclare, Mis	3,280		200	x	x
598		McClosky, Mis	3,300		400	x	x
599		2 or more pays					
600	Harco;† Saline; 8S; 5E			1954	760	137	991
601		Hardinsburg, Mis*	2,330		10	x	x
602		Cypress, Mis	2,618	1959	10	x	x
603		Paint Creek, Mis	2,675		30	x	x
604		Aux Vases, Mis	2,860		660	x	x
605		Ohara, Mis	2,965		80	x	x
606		Rosiclare, Mis	2,970		140	x	x
607		2 or more pays					
608	Harco E;† Saline; 8S; 5E			1955	240	19	228
609		Cypress, Mis	2,575		60	x	x
610		Aux Vases, Mis	2,865		160	x	x
611		Ohara, Mis	2,880		40	x	x
612		2 or more pays					
613	Harrisburg;† Saline; 8S; 6E			1954	90	9	126
614		Waltersburg, Mis	2,020		80	9	125.5
615		Tar Springs, Mis	2,115		10	0	0.5
616	Harrisburg S; Saline; 9S; 6E	Cypress, Mis	2,300	1955	10	abd 1956	0
617	Harristown; Macon; 16N; 1E	Silurian, Sil	2,050	1954	200	24	96
618	Herald C;† Gallatin, White; 6-8S; 9-10E			1939	5,000	478	10,377
619		Pennsylvanian, Pen	1,060		10	x	x
620		Pennsylvanian, Pen	1,500		180	x	x

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

(Continued)

(M bbls.)		Number of wells					Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959					Gravity API	Sulfur percent	Character	Av. thick-ness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandon-ed	Producing end of year									
0.2	0.2	4	0	0	3	39	x	L	6	AC	Mis	3,361	551	
		1	0	0	1	x	x	S	5	X	Mis	3,238	552	
		1	0	0	0	x	x	L	11	X	Mis	3,180	553	
		2	0	0	0	x	x	S	30	X	Ord	2,000	554	
		5	0	0	0	x	x	S	15	MC	Mis	2,630	555	
2	2	14	1	0	5					MC	Mis	2,592	556	
		13	0	0		x	x	S	12	MC			557	
		1	1	0				S	11				558	
		14	0	0	0	32	x	S	7	ML	Tren	3,290	559	
		34	0	0	28			S		D	Sil	2,456	560	
		5	0	0		x	x	L	10	D			561	
		29	0	0		x	x	L	8	R			562	
		35	1	0	31	x	x	L	6	MC	Mis	2,961	563	
		5	0	0	1			S	5	M	Dev	3,305	564	
		4	0	0		x	x	S		ML			565	
		0	0	0		x	x	L	3	MC			566	
		1	0	0									567	
99	99	27	0	0	27	x	x	L	30	R	Tren	3,310	568	
		27	0	1	25	x	x	OL	3	MC	Mis	2,952	569	
		23	0	0	2	30	x	S	x	T	Ord	2,560	570	
		1	0	0	1	x	x	L	9	X	Sil	1,770	571	
13	44	428	7	6	333									572
W		21	0	0		x		S	11	A	Mis	3,607	573	
		152	6	2		40	0.14	S	15	HL			574	
W		31	0	1		39	x	OL	6	AC			575	
W		38	2	0		39	x	LS	7	AC			576	
W		103	1	4		40	0.19	OL	7	AC			577	
		1	0	0		x	x	L	10	HL			578	
		92	1	1									579	
		1	0	0	0	x	x	L	3	X	Mis	3,420	580	
		43	0	1	32									581
		0	0	0		x	x	S	3	ML	Mis	3,509	582	
		20	0	1		40	x	S	25	ML			583	
		0	0	0		37	x	L	4	MC			584	
		5	0	0		37	x	L	5	MC			585	
		6	0	0		x	x	L	6	MC			586	
		12	0	0									587	
		6	0	0	4	x	x	S	10	M	Ord	2,694	588	
		2	0	0	1						Mis	3,024	589	
		0	0	0		x	x	S	6	X			590	
		1	0	0		x	x	L	6	X			591	
		1	0	0									592	
		1	0	0	0	x	x	L	5	A	Tren	3,184	593	
		62	0	0	59					M	Mis	3,510	594	
		1	0	0		x	x	S	18	ML			595	
		33	0	0		x	x	L	11	MC			596	
		5	0	0		x	x	L	4	MC			597	
		19	0	0		27	x	L	10	MC			598	
3	3	6	0	0									599	
		73	5	5	59					X	Mis	3,163	600	
		0	0	0		x	x	S	6	X			601	
		1	1	0		x	x	S	8	X			602	
		3	0	1		x	x	S	8	X			603	
W		57	4	4		x	x	S	15	X			604	
		3	0	0		x	x	L	10	X			605	
		6	0	0		x	x	LS	10	X			606	
		3	0	0									607	
2	2	21	0	0	18					X	Mis	3,031	608	
W		5	0	0		x	x	S	20	X			609	
W		10	0	0		x	x	S	8	X			610	
		2	0	0		x	x	L	14	X			611	
		1	0	0									612	
		9	0	0	6					X	Mis	2,930	613	
		8	0	0		x	x	S	14	X			614	
		1	0	0		x	x	S	6	X			615	
		1	0	0	0	x	x	S	x	X	Mis	2,352	616	
		10	3	0	8	x	x	L	3	MU	Sil	2,107	617	
189	280	509	5	10	395					A	Mis	3,394	618	
		1	0	0		29	x	S	10	AL			619	
		15	2	1		29	x	S	15	AL			620	

TABLE 10.—

Line no.	Pool; County; Twp.-Range	Pay zone		Year of discovery	Area proved (acres)	Oil production	
		Name, age and depth	Total primary and secondary				
			During 1959			To end of 1959	
621		Pennsylvanian, Pen	1,750		40	x	x
622		Degonia, Mis	1,920		30	x	x
623		Clore, Mis*	1,965		20	x	x
624		Palestine, Mis	1,940		10	x	x
625		Waltersburg, Mis	2,240		420	x	x
626		Tar Springs, Mis	2,260		450	x	x
627		Cypress, Mis	2,660		1,510	x	x
628		Paint Creek, Mis*	x		10	x	x
629		Bethel, Mis	2,790		210	x	x
630		Aux Vases, Mis	2,920		2,130	x	x
631		Ohara, Mis	2,965		140	x	x
632		Rosiclare, Mis	3,005		140	x	x
633		McClosky, Mis	3,010		420	x	x
634		2 or more pays					
635	Hidalgo; Jasper; 8N; 10E	McClosky, Mis	2,575	1940	60	abd 1952	10
636	Hidalgo N; Cumberland; 9N; 9E			1946	80	3	19
637		Rosiclare, Mis	2,655	1946	60	x	x
638		McClosky, Mis	2,676	1959	40	x	x
639		2 or more pays					
640	Hill; Effingham; 6N; 6E	McClosky, Mis	2,565	1943	80	abd 1950	41
641	Hill E; Effingham; 6N; 6E			1954	430	78	763
642		Cypress, Mis	2,460		250	x	x
643		Aux Vases, Mis	2,650		10	x	x
644		Rosiclare, Mis	2,660		40	x	x
645		McClosky, Mis	2,700		160	x	x
646		2 or more pays					
647	Hoffman; Clinton; 1N; 2W			1939	260	8	737
648		Cypress, Mis	1,190		120	x	x
649		Bethel, Mis	1,320		180	x	x
650		2 or more pays					
651	Hoodville E; Hamilton; 5S; 7E	McClosky, Mis	3,365	1944	20	abd 1944	1
652	Hord; Clay; 5N; 6E			1950	290	36	436
653		Aux Vases, Mis	2,702	1959	20	6	6
654		Ste. Genevieve, Mis	2,800	1950	270	30	430
655	Hord N; Effingham; 6N; 6E			1958	40	24	29
656		Cypress, Mis	2,430	1958	30	x	x
657		Aux Vases, Mis	2,633	1959	20	x	x
658	Hord S C; Clay; 5N; 6E			1942	560	108	1,060
659		Aux Vases, Mis	2,735		20	x	x
660		Ste. Genevieve, Mis	2,790		540	x	x
661	Hornsby S; Macoupin; 8N; 6W	Pennsylvanian, Pen	640	1956	40	x	x
662	Hoyleton W; Washington; 1S; 2W	Clear Creek; Dev	2,895	1955	20	abd 1957; rev 1959	
663	Huey; Clinton; 2N; 2W	Bethel, Mis	1,260	1945	100	0.3	2
664	Huey S; Clinton; 1-2N; 2-3W			1953	230	0.4	4
665		Cypress, Mis	1,080		120	x	x
666		Silurian, Sil	2,585		120	x	x
667	Hunt City; Jasper; 7N; 10E	Rosiclare, Mis	2,540	1945	20	abd 1950	1
668	Hunt City E; Jasper; 7N; 14W	Fredonia, Mis	1,845	1952	20	abd 1954	4
669	Ina; Jefferson; 4S; 2-3E			1938	450	122	302
670		Renault, Mis	2,725		70	abd 1946; rev 1954	x
671		Aux Vases, Mis	2,682	1958	20	x	x
672		Rosiclare, Mis	2,775		60	x	x
673		McClosky, Mis	2,775		80	x	x
674		St. Louis, Mis	3,000		160	x	x
675		Salem, Mis	3,210		80	x	x
676		2 or more pays					
677	Ina N; Jefferson; 4S; 3E	McClosky, Mis	2,940	1949	20	abd 1950	1
678	Inclose;† Clark, Edgar; 12N; 13-14W	Isabel, Pen	345	1941	90	x	x
679	Ingraham; Clay; 4N; 8E			1942	680	26	820
680		Aux Vases, Mis*	2,915		10	abd 1945; rev 1954	x
681		Rosiclare, Mis	3,000		620	x	x
682		McClosky, Mis	3,075		100	x	x
683	Inman E C; Gallatin; 7-8S; 10E			1940	3,620	1,070	17,170
684		Pennsylvanian, Pen	780		10	x	x
685		Pennsylvanian, Pen	1,450		40	x	x
686		Degonia, Mis	1,690		50	x	x
687		Clore, Mis	1,725		60	x	x
688		Palestine, Mis	1,840		50	x	x
689		Waltersburg, Mis	1,980		620	x	x
690		Tar Springs, Mis	2,080		1,520	x	x

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thick-ness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandon-ed	Producing end of year								
		4	1	0		29	x	S	18	AL			621
		3	0	1		36	x	S	12	AL			622
		0	0	0		x	x	S	10	AL			623
W		1	0	0		x	x	S	20	AL			624
		39	0	0		38	x	S	10	A			625
W		36	0	1		37	0.24	S	13	A			626
		145	1	4		36	0.22	S	14	A			627
		0	0	0		36	x	S	x	AL			628
W		15	0	0		36	x	S	11	AL			629
		207	2	2		36	x	S	6	AL			630
		5	0	0		37	x	L	6	AC			631
		3	0	0		x	x	L	4	AC			632
		16	0	1		38	x	L	10	AC			633
		25	0	0									634
		3	0	0	0	37	0.20	L	4	MC	Dev	4,140	635
		4	2	0	4	x	x	S		X	Mis	2,776	636
		3	1	0				OL	12	X			637
		2	2	0					9				638
		1	1	0									639
		2	0	0	0	39	x	L	5	N	Mis	2,710	640
x	x	33	0	0	31					X	Mis	3,251	641
W		23	0	0		38	x	S	8	X			642
		1	0	0		x	x	S	10	X			643
		1	0	0		x	x	L	5	X			644
		7	0	0		x	x	L	7	X			645
		1	0	0									646
		48	0	1	26	x	x	S	11	A	Dev	2,914	647
		12	0	1									648
		35	0	0		33	0.21	S	7	A			649
		1	0	0									650
98	98	1	0	0	0	x	x	L	3	N	Mis	3,411	651
		15	3	1	10	x	x	L	5	M	Mis	2,954	652
W		2	2	0				S	10				653
		13	1	1	4	x	x	L	5	M	Mis	2,860	654
		5	3	1						X			655
		3	1	0		x	x	S		X			656
		2	2	0					10				657
		26	0	0	24					N	Mis	2,975	658
		2	0	0		x	x		8	N			659
		24	0	0		x	x	L	7	NC			660
		4	3	1	2	x	x	S	1	X	Pen	715	661
		1	0	0	1	x	x	L	12	X	Sil	2,965	662
		7	0	0	1	x	x	S	6	AL	Dev	2,720	663
		19	2	1	14					X	Sil	2,675	664
		13	1	1		x	x	S	5	X			665
		6	1	0		x	x	L	10	X			666
		1	0	0	0	x	x	S	10	ML	Mis	2,715	667
		1	0	0	0	40	x	L	6	X	Mis	1,855	668
		27	3	0	24					A	Mis	3,521	669
		7	1	0		x	x	S	14	AL			670
		2	2	0		x	x	S	26	A			671
		3	2	0		x	x	S	10	A			672
		4	1	0		x	x	L	10	A			673
		8	1	0		36	0.20	L	4	AC			674
		4	1	0		x	x	L	9				675
		1	0	0									676
		1	0	0	0	x	x	L	4	X	Mis	3,150	677
		11	2	0	7	x	x	S	8	AL	Mis	1,600	678
25	253	33	0	0	27					M	Mis	3,148	679
		0	0	0		x	x	S	15	ML			680
W		28	0	0		37	0.21	L	7	MC			681
1,268	4,771	5	0	0		37	0.21	L	8	MC			682
		367	3	3	325					A	Mis	3,020	683
		4	0	0		38	x	S	10	AF			684
		1	0	0		x	x	S	4	AF			685
		1	0	0		37	x	S	10	AF			686
W		1	0	0		37	x	S	8	AF			687
W		1	0	0		37	x	S	13	AF			688
W		40	1	0		38	x	S	18	AF			689
W		127	0	1		36	0.24	S	13	AF			690

TABLE 10.—

Line no.	Pool; County; Twp.-Range	Pay zone		Year of discovery	Area proved (acres)	Oil production		
		Name, age and depth				Total primary and secondary		
						During 1959	To end of 1959	
691	Inman W C; Gallatin; 7-8S; 9-10E	Hardinsburg, Mis	2,135	1940	220	x	x	
692		Cypress, Mis	2,390		1,470	x	x	
693		Aux Vases, Mis	2,715		240	x	x	
694		Ohara, Mis	2,795		20	x	x	
695		Rosiclare, Mis	2,790		20	x	x	
696		McClosky, Mis	2,800		140	x	x	
697		St. Louis, Mis	2,960		20	x	x	
698		2 or more pays						
699			Pennsylvanian, Pen		925	3,270	343	5,108
700						40	x	x
701		Pennsylvanian, Pen	1,630		30	x	x	
702		Biehl, Pen	1,750		60	x	x	
703		Palestine, Mis	1,765		40	x	x	
704		Waltersburg, Mis	2,080		100	x	x	
705		Tar Springs, Mis	2,140		850	x	x	
706		Hardinsburg, Mis	2,300		220	x	x	
707		Cypress, Mis	2,475		1,420	x	x	
708		Paint Creek, Mis	2,610		10	x	x	
709		Renault, Mis	2,775		30	x	x	
710		Aux Vases, Mis	2,790		600	x	x	
711	Iola Cen; Clay; 5N; 5E Iola C; Clay, Effingham; 5-6N; 5-6E	Ohara, Mis	2,815	1954 1939	100	x	x	
712		Rosiclare, Mis	2,815		40	x	x	
713		McClosky, Mis	2,940		280	x	x	
714		2 or more pays						
715		Bethel, Mis	2,420		10	abd 1957	1	
716					3,290	662	10,862	
717		Tar Springs, Mis*	1,890		10	x	x	
718		Cypress, Mis	2,125		490	x	x	
719		Paint Creek, Mis*	2,255		30	x	x	
720		Bethel, Mis	2,290		890	x	x	
721	Iola S; Clay; 4N; 5E	Renault, Mis*	2,320	1947	10	x	x	
722		Aux Vases, Mis	2,325		1,690	x	x	
723		Rosiclare, Mis	2,400		1,040	x	x	
724		McClosky, Mis	2,425		860	x	x	
725		2 or more pays						
726					200	10	222	
727		Bethel, Mis	2,490		120	x	x	
728		Rosiclare, Mis	2,590		100	x	x	
729		McClosky, Mis	2,650		40	x	x	
730		2 or more pays						
731	Iola W; Clay; 5N; 5E	McClosky, Mis	2,495	1945	20	abd 1945	0.5	
732	Irvington; Washington; 1S; 1W			1940	1,270	213	6,790	
733		Barlow, Mis*	1,525		10	x	x	
734		Cypress, Mis	1,380		320	x	x	
735		Bethel, Mis	1,535		870	x	x	
736		Clear Creek, Dev	3,090		420	x	x	
737		Trenton, Ord	4,275		120	x	x	
738		2 or more pays						
739	Irvington E; Jefferson; 1S; 1E			1951	280	71	432	
740		Pennsylvanian, Pen	1,030		40	3	17	
741	Irvington N; Washington; 1N, 1S; 1W	Cypress, Mis	1,750	1953	60	x	x	
742		Bethel, Mis	1,950		200	x	x	
743		2 or more pays						
744					260	78	718	
745		Cypress, Mis	1,340		40	x	x	
746		Bethel, Mis	1,470		220	x	x	
747	Iuka; Marion; 2N; 4E			1947	800	37	725	
748		Ohara, Mis	2,650		120	x	x	
749		Rosiclare, Mis*	2,660		100	x	x	
750		McClosky, Mis	2,750		640	x	x	
751	Iuka W; Marion; 2N; 3-4E Jacksonville Gas;† Morgan; 15N; 9W Johnson N; Clark; 9-10N; 14W	St. Louis, Mis	2,775	1955 1910 1907	300	x	x	
752		2 or more pays						
753		McClosky, Mis	2,700		80	2	10	
754		Gas, Pen, Mis	330		60	abd 1939	2	
755					2,500	x	x	
756		Kickapoo, Pen	315		200	See Clark Co. Div.		
757		Claypool, Pen	415		1,220	x	x	
758		Casey, Pen	465		920	x	x	
759		Upper Partlow, Pen	535		290	x	x	
760		Carper, Mis	1,325		80	x	x	

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thick-ness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandon-ed	Producing end of year								
W		9	0	0		34	x	S	10	AF			691
W		106	2	1		35	0.23	S	14	AF			692
		24	0	1		38	x	S	8	AF			693
		1	0	0		x	x	L	5	AF			694
		1	0	0		x	x	L	7	AF			695
		4	0	0		38	x	L	8	AF			696
		1	0	0		x	x	L	10	AF			697
		45	0	0									698
91	390	291	5	4	247								699
		4	0	0		x	x	S	8	NL	Mis	3,094	700
W		3	1	0		x	x	S	5	NL			701
		6	0	0		x	x	S	12	NL			702
		3	0	0		31	x	S	13	NL			703
		8	0	0		x	x	S	10	TL			704
W		55	2	0		37	x	S	8	TL			705
		8	0	1		x	x	S	10	TL			706
W		97	0	1		37	x	S	10	T			707
		1	0	0		x	x	S	30	T			708
		1	0	0		x	x	L	7	T			709
W		44	2	1		x	x	S	15	TL			710
		2	0	0		x	x	L	12	TC			711
		1	0	1		x	x	L	8	TC			712
		7	0	0		36	0.19	L	6	TC			713
		57	2	0									714
		1	0	0	0	x	x	S	5	X	Mis	2,723	715
416	557	262	4	3	200					A	Dev	4,227	716
		0	0	0		x	x	S	9	AL			717
W		29	0	2		36	x	S	15	A			718
W		0	0	0		x	x	S	10	AL			719
W		36	2	0		36	0.14	S	12	A			720
		0	0	0		x	x	L	x	AC			721
W		105	3	2		35	0.25	S	10	A			722
		29	4	0		37	x	LS	7	A			723
		29	2	1		38	x	OL	10	A			724
		68	3	0									725
		15	0	0	12					A	Dev	4,325	726
		9	0	0		x	x	S	10	AL			727
		4	0	0		x	x	L	6	AC			728
		1	0	0		x	x	L	3	AC			729
		1	0	0									730
		1	0	0	0	x	x	L	11	MC	Mis	2,613	731
17	26	136	0	0	110					A	Ord	4,440	732
		0	0	0		x	x	L	3	AC			733
W		30	0	0		38	x	S	12	A			734
W		82	0	0		38	0.16	S	12	A			735
		16	0	0		39	0.27	L	12	A			736
		5	0	0		39	x	L	90	A			737
		3	0	0									738
		26	0	0	25					X	Mis	2,222	739
		4	0	0		x	x	S	15	X			740
		4	0	0		x	x	S	15	X			741
		15	0	0		x	x	S	x	X			742
		3	0	0									743
		26	0	0	26					A	Ord	4,334	744
		4	0	0		x	x	S	16	AL			745
		22	0	0		x	x	S	6	AL			746
		40	0	3	34					M	Mis	2,911	747
		1	0	0		x	x	L	5	MC			748
		0	0	1		x	x	L	15	MC			749
		19	0	3		x	x	L	10	MC			750
		6	0	0		x	x	L	5	MC			751
		14	0	1									752
		3	0	0	2	x	x	L	5	X	Mis	2,801	753
		8	0	0	0	x	x	LS	5	ML	Ord	1,390	754
205 for production	498	513	1	1	236					AM	Dev	2,260	755
		33	0	0		x	x	S	x	AM			756
W		301	0	1		x	x	S	x	AM			757
W		185	0	0		33	x	S	x	AM			758
		51	0	0		x	x	S	x	AM			759
		8	1	0		x	x	S	x	AM			760

TABLE 10.—

Line no.	Pool; County; Twp.-Range	Pay zone		Year of discovery	Area proved (acres)	Oil production	
		Name, age and depth	Total primary and secondary				
			During 1959			To end of 1959	
761	Johnson S; Clark; 9N; 14W			1907	2,270	x	x
762		Claypool, Pen	390		200	See Clark Co. Div.	
763		Casey, Pen	450		300	x	x
764		Upper Partlow, Pen	490		1,700	x	x
765		Lower Partlow, Pen	600		870	x	x
766	Johnsonville C; Wayne; 1N, 1S; 6-7E			1940	9,100	1,765	34,285
767		Bethel, Mis*	2,950		30	x	x
768		Aux Vases, Mis	3,020		2,550	x	x
769		Ohara, Mis	3,120		600	x	x
770		Rosiclar, Mis	3,150		140	x	x
771		McClosky, Mis	3,170		8,320	x	x
772		2 or more pays					
773	Johnsonville N; Wayne; 1N; 6E			1943	120	4	75
774		Ohara, Mis*	3,190		40	x	x
775		Rosiclar, Mis	3,220		40	x	x
776		McClosky, Mis*	3,250		40	x	x
777		2 or more pays					
778	Johnsonville S; Wayne; 1S; 6E			1942	440	14	542
779		Aux Vases, Mis	3,060		270	x	x
780		Rosiclar, Mis	3,160		20	x	x
781		McClosky, Mis	3,200		160	x	x
782	Johnsonville W; Wayne; 1N, 1S; 5-6E			1942	520	48	704
783		Bethel, Mis	2,925		10	x	x
784		Aux Vases, Mis	2,900		170	x	x
785		Ohara, Mis	2,930		60	x	x
786		Rosiclar, Mis	3,015		20	x	x
787		McClosky, Mis	3,100		270	x	x
788	Johnston City E; Williamson; 8S; 3E	Cypress, Mis	2,290	1959	20	6	6
789	Junction; Gallatin; 9S; 9E			1939	220	13	557
790		Pennsylvanian, Pen	1,150		30	1	20
791		Waltersburg, Mis	1,750		160	11	520
792		Hardinsburg, Mis	2,120		10	0	5
793		Cypress, Mis	2,275		20	x	x
794		McClosky, Mis*	2,730		20	x	x
795		2 or more pays					
796	Junction City C; Marion; 2N; 1E			1910	140	x	x
797		Dykstra (Cuba), Pen	510	1910	110	x	3
798		Wilson, Pen	680	1952	30	2	37
799	Junction E; Gallatin; 8-9S; 9E	Waltersburg, Mis	2,000	1953	20	2	109
800	Junction N; Gallatin; 8-9S; 9E			1946	160	9	
801		Pennsylvanian, Pen	1,565		50	x	x
802		Cypress, Mis	2,450		30	x	x
803		Aux Vases, Mis	2,725		30	x	x
804		Rosiclar, Mis	2,860		60	x	x
805	Keensburg E; Wabash; 2S; 13W			1939	120	abd 1947	9
806		Ohara, Mis	2,705		40	0	x
807		McClosky, Mis	2,710		80	0	x
808	Keensburg S; Wabash; 2-3S; 13W			1944	230	14	540
809		Pennsylvanian, Pen	1,145		60	x	x
810		Cypress, Mis	2,385		130	x	x
811		Ohara, Mis	2,715		40	0	66
812	Keenville; Wayne; 1S; 5E			1945	720	96	1,917
813		Aux Vases, Mis	2,960		250	x	x
814		Ohara, Mis	3,050		80	x	x
815		Rosiclar, Mis	3,060		20	x	x
816		McClosky, Mis	3,100		400	x	x
817		2 or more pays					
818	Keenville E; Wayne; 1S; 5E	McClosky, Mis	3,140	1951	60	3	60
819	Kell; Jefferson; 1S; 3E	McClosky, Mis	2,625	1942	120	3	8
820	Kellerville; Adams; 1-2S; 5W	Silurian, Sil	637	1959	80	abd 1946; rev 1958	5
821						5	5
821	Kenner; Clay; 3N; 5-6E			1942	1,030	296	1,562
822		Tar Springs, Mis	2,200		10	0	x
823		Bethel, Mis	2,690		670	x	x
824		Renault, Mis	2,761	1958	100	x	x
825		Aux Vases, Mis	2,835		410	x	x
826		Rosiclar, Mis	2,875		20	0	x
827		McClosky, Mis	2,930		20	0	x
828		Carper, Mis	4,221	1959	10	x	x
829		Devonian, Dev	4,424	1959	40	x	x
830		2 or more pays					

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thickness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandoned	Producing end of year								
210 for production	2,499	573	0	5	212					AM	Dev	2,030	761
W		38	0	0		x	x	S	x	AM			762
W		60	0	2		30	x	AM	x	AM			763
W		431	0	1		29	x	S	48	AM			764
		178	0	2		29	x	S	x	AM			765
1,692	2,952	426	6	2	336					A	Dev	5,198	766
W		0	0	0		x	x	S	12	AL			767
W		100	6	0		39	0.14	S	20	AL			768
		6	0	0		x	x	OL	10	AC			769
		5	0	0		38	x	OL	8	AC			770
W		277	0	2		38	0.17	OL	15	AC			771
		39	0	0									772
		5	0	0	4					A	Mis	3,335	773
		0	0	0		38	0.17	OL	3	AC			774
		4	0	0		x	x	L	8	AC			775
		0	0	0		38	0.17	OL	3	AC			776
		1	0	0						A			777
		33	0	0	24					A	Mis	3,300	778
		26	0	0		39	x	S	15	A			779
		1	0	0		x	x	L	4	AC			780
		6	0	0		38	x	L	5	AC			781
		35	0	0	24					M	Mis	3,251	782
		1	0	0		x	x	S	7	ML			783
		17	0	0		x	x	S	6	ML			784
		3	0	0		x	x	L	6	MC			785
		1	0	0		x	x	L	4	MC			786
		13	0	0		x	x	L	7	MC			787
		2	2	0	2	x	x	S	20	X	Mis	2,317	788
10	250	22	1	0	17					M	Mis	2,818	789
		3	0	0		x	x	S	7	ML			790
W		16	1	0		35	x	S	14	ML			791
		1	0	0		x	x	S	5	ML			792
		1	0	0		x	x	S	12	ML			793
		0	0	0		x	x	L	9	MC			794
		1	0	0									795
		14	1	0	x	x	x	S	8	NL	Dev	3,346	796
		11	0	0		x	x	S	x	NL			797
		3	1	0		x	x	S	8	NL			798
		2	0	0	2	x	x	S	14	X	Mis	2,970	799
		14	0	0	11					M	Mis	2,983	800
		5	0	0		x	x	S	16	ML			801
		3	0	0		x	x	S	10	ML			802
		3	0	0		x	x	S	4	ML			803
		3	0	0		x	x	L	6	MC			804
		3	0	0	0					M	Mis	2,802	805
		1	0	0		x	x	L	10	MC			806
		2	0	0		38	0.26	L	6	MC			807
x	x	18	0	0	13					A	Mis	2,879	808
		6	0	0		x	x	S	15	AL			809
W		11	0	0		38	x	S	9	AL			810
		1	0	0		x	x	L	10	AC			811
84	84	53	0	2	41					A	Mis	3,267	812
W		25	0	1		37	x	S	20	AL			813
		2	0	0		x	x	L	8	AC			814
		1	0	0		x	x	L	10	AC			815
W		23	0	1		36	x	L	7	AC			816
		2	0	0									817
		3	0	0	2	x	x	L	10	X	Mis	3,220	818
		5	2	0	4	39	0.26	L	6	A			819
		4	4	0	4	35		D	7	C	Mis	2,720 675	820
144	317	93	16	2	84						Dev	4,624	821
		1	0	0		x	x	S	7	AL			822
W		50	0	0		38	0.22	S	10	A			823
		10	8	0		x	x	L	9	A			824
W		40	11	2		x	x	S	9	AL			825
		1	0	0		x	x	LS	5	AC			826
		1	0	0		x	x	L	7	AC			827
		1	1	0		x	x	L	10				828
		1	1	0					55				829
		6	5	0									830

TABLE 10.—

Line no.	Pool; County; Twp.-Range	Pay zone		Year of discovery	Area proved (acres)	Oil production		
		Name, age and depth	Total primary and secondary					
			During 1959			To end of 1959		
831	Kenner N; Clay; 3N; 6E	Bethel, Mis	2,755	1947	310	11	829	
832		McClosky, Mis	2,970		290	x	x	
833		McClosky, Mis	2,870	1950	120	x	x	
834		Kenner S; Clay; 2N; 5E			20	abd 1952	3	
835		Kenner W; Clay; 3N; 5E			310	47	1,835	
836		Cypress, Mis	2,600		300	x	x	
837		Bethel, Mis	2,705		200	x	x	
838		McClosky, Mis*	2,870		40	x	x	
839		2 or more pays						
840	Keyesport; Clinton; 3N; 2W	Bethel, Mis	1,180	1949	160	6	125	
841	Kincaid C; Christian; 13-14N; 3W	Hibbard, Dev	1,800	1955	1,430	604	3,538	
842		Silurian, Sil	1,874	1955	1,420	x	x	
843				1959	10	x	x	
844		King; Jefferson; 3-4S; 3E		1942	1,150	91	2,745	
845			Renault, Mis	2,718	1959	10	x	x
846		Aux Vases, Mis	2,725	1942	1,070	x	x	
847		Ohara, Mis	2,765		160	x	x	
848		Rosiclare, Mis	2,815		140	x	x	
849		McClosky, Mis	2,840		120	x	x	
850		2 or more pays						
851	Kinmundy; Marion; 4N; 3E	Bethel, Mis	1,915	1950	40	1	24	
852		Salem, Mis	2,430		20	1	24	
853		Bethel, Mis	2,040	1953	10	abd 1954	0.5	
854		Kinmundy N; Marion; 4N; 3E	Bethel, Mis	2,335	1943	40	1	20
855		LaCleda; Fayette; 5N; 4E			1941	130	4	252
856	Lakewood; Shelby; 10N; 2-3E	Bethel, Mis	1,690		80	x	x	
857		Aux Vases, Mis	1,720		50	x	x	
858								
859		Lancaster; Lawrence; Wabash; 1-2N; 13W			1940	1,420	35	2,803
860			Tar Springs, Mis	2,050	1959	10	x	x
861		Paint Creek, Mis	2,530		10	x	x	
862		Bethel, Mis	2,540		890	x	x	
863		Ohara, Mis	2,670		40	x	x	
864		McClosky, Mis	2,690		500	x	x	
865		2 or more pays						
866	Lancaster Cen; Wabash; 1N; 13W			1946	300	2	371	
867		Ohara, Mis	2,750		100	x	x	
868		Rosiclare, Mis	2,810		260	x	x	
869		McClosky, Mis*	2,815		40	x	x	
870		2 or more pays						
871	Lancaster E; Wabash; 2N; 13W				50	2	42	
872		Biehl, Pen	1,745		30	2	22	
873		Rosiclare, Mis	2,660		20	0	20	
874		Lancaster S; Wabash; 1N; 13W			1946	110	17	294
875			Bethel, Mis	2,520		70	17	277.5
876	Ohara, Mis		2,670		20	0	0.5	
877	McClosky, Mis		2,720		20	0	16	
878	Langewish-Kuester; Marion; 1N; 1E				1910	150	x	x
879		Unnamed, Pen	795	1951	20	x	x	
880		Cypress, Mis	1,600	1910	130	x	x	
881	Lawrence; Crawford, Lawrence; 2-5N; 11-13W			1906	40,530	x	x	
882						See Lawrence Co. Div.		
883	Trivoli, Pen	290			x	x	x	
884	Cuba, Pen	450			x	x	x	
885	Bridgeport, Pen	800			x	x	x	
886	Pennsylvanian, Pen	950			x	x	x	
887	Buchanan, Pen	1,250			x	x	x	
888	Tar Springs, Mis	1,410			x	x	x	
889	Hardinsburg, Mis	1,570			x	x	x	
890	Jackson ("Gas"), Mis	1,370			x	x	x	
	Cypress (Kirkwood), Mis	1,400			x	x	x	
891	Paint Creek, Mis	1,600			x	x	x	
892	Bethel (Tracey), Mis	1,650			x	x	x	
893	Renault, Mis	1,695			x	x	x	
894	Aux Vases, Mis	1,775			x	x	x	
895	Ohara, Mis	1,750			x	x	x	
896	Rosiclare, Mis	1,860			x	x	x	
897	McClosky, Mis	1,860			x	x	x	
898	St. Louis, Mis	1,660			x	x	x	
899	Salem, Mis	1,955			x	x	x	
900	2 or more pays							

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

## 53

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thickness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandoned	Producing end of year								
0 W	0	33 28 5	1 1 0	0 0 0	24	36 36 37	x x x	S L L	8 6 10	A A AC	Mis	3,076	831 832 833
30 W W	343	1 30 14 2 0 14 16	0 0 0 0 0 0 2	0 0 0 0 0 0 0	0 24	37 36 38 38	x x x x	L S S L	10 26 9 4	AC A A A	Mis Dev	3,000 4,800	834 835 836 837 838 839 840
		133 132 1 104 1 85 1 4 2 10	31 30 1 2 1 2 0 0 1	0 0 0 6 0 5 0 2 0 1	133 71	x x	x x	DS D	19 7	MU MU X A	Sil Dev	1,971	841 842 843 844 845 846 847 848 849 850
		3 2 1 1 5 12 7 5 105 1	0 0 0 0 1 0 0 0 1 1	0 0 0 0 0 3 3 0 0 0	2 0 3 8 63	34 x x 36 38 32 x	x x 0.18 x 0.23 x	S L S S S	3 7 6 15 A 8 3	A A A X A AL A A	Dev Mis Mis Sil Mis	3,650	851 852 853 854 855 856 857 858 859 860
10	10	1 71 1 30 1 14 2 8 0 4	0 0 0 0 0 0 0 2 0 0	0 0 0 0 0 2 0 0 0	3	x 39 x 40 x x x	x x 0.28 x x x	S S L L L L	5 14 10 7	AL AL AC AC	Mis	2,888	861 862 863 864 865 866 867 868 869 870
8 W	43	4 3 1 13 11 1 1 15 2 13	0 0 0 0 0 0 0 4 0 0	0 0 0 0 0 0 0 0 0	3 11 x	x x 32 x x x x x	x x x x x x	S L S L L S S	10 6 6 12 x x x	M ML MC M ML MC MC N N N	Mis Mis Dev	2,750 2,817 3,447	871 872 873 874 875 876 877 878 879 880
4,194 for production	19,247	5,193	128	73	2,160					A	St. P	5,190	881
W		11 1 1,263 15 514 2 1 252	0 0 0 1 1 0 0 6	0 0 x x x x x x		x x 33 x 33 x 33 x	x x x x x x	S S S S S S	x x 40 15 15 10 10 15	A A A A A A A			882 883 884 885 886 887 888 889
W		3,306	114	x		33	x	S	30	A			890
W		20 907 3 22 9 23 4 1 101	13 6 0 5 1 0 15 1 0 32	x x x x x x x x x 2		x 38 x x x 33 x x x	x x x x x x x	S S S L LS L L L	8 20 7 8 8 4 10 10 2	A A A A A A A A A			891 892 893 894 895 896 897 898 899 900

TABLE 10.—

Line no.	Pool; County; Twp.—Range	Pay zone		Year of discovery	Area proved (acres)	Oil production	
		Name, age and depth	Total primary and secondary				
			During 1959			To end of 1959	
901	Lawrence Co. Div; Lawrence				41,230	7,161	279,553
902	Lawrence W; Lawrence; 3N; 13W			1952	270	10	400
903		Paint Creek, Mis*	2,040		10	x	x
904		Bethel, Mis	2,050		240	x	x
905		Aux Vases, Mis	2,110		10	0	3
906		McClosky, Mis	2,225		40	x	x
907		2 or more pays					
908	Lexington; Wabash; 1S; 14W			1947	200	5	384
909		Cypress, Mis	2,585		10	1	13
910		McClosky, Mis	2,970		200	4	371
911	Lexington N; Wabash; 1S; 14W	Ste. Genevieve, Mis	2,915	1951	40	abd 1958	6
912	Lillyville; Cumberland, Effingham; 8-9N; 6-7E	McClosky, Mis	2,425	1946	160	13	365
913	Litchfield; Montgomery; 8-9N; 5W	Unnamed, Pen	660	1889	100	x	24
914	Livingston; Madison; 6N; 6W	Pennsylvanian, Pen	535	1948	390	41	492
915	Livingston S;† Madison; 5-6N; 6W	Pennsylvanian, Pen	530	1950	330	9	168
916	Locust Grove; Wayne; 1N; 9E			1951	120	10	162
917		Aux Vases, Mis	3,215		80	x	x
918		Ohara, Mis	3,240		40	x	x
919		McClosky, Mis*	3,280		20	x	x
920		2 or more pays					
921	Locust Grove S; Wayne; 1S; 9E			1953	160	33	77
922		Ohara, Mis	3,248	1958	40	x	x
923		Rosiclare, Mis	3,300	1953	60	x	x
924		McClosky, Mis	3,286	1958	80	x	x
925		2 or more pays		1958			
926	Long Branch; Hamilton, Saline; 7S; 6E			1950	120	18	233
927		Palestine, Mis	2,070		20	6	94
928		Cypress, Mis	2,745		30	x	x
929		Aux Vases, Mis	3,095		60	x	x
930		McClosky, Mis	3,220		40	x	x
931		2 or more pays					
932	Long Branch S; Saline; 8S; 6E	Cypress, Mis	2,660	1955	10	0	9
933	Louden;† Effingham, Fayette; 6-9N; 2-4E			1937	23,300	12,595	236,668
934		Cypress, Mis	1,500		23,120	x	x
935		Paint Creek, Mis	1,540		4,040	x	x
936		Bethel, Mis	1,550		9,030	x	x
937		Aux Vases, Mis	1,600		70	x	x
938		McClosky, Mis	1,785		20	x	x
939		Carper, Mis	2,830		30	x	x
940		Geneva, Dev	3,000		2,800	x	x
941		Trenton, Ord*	3,905		20	x	x
942		2 or more pays					
943	Louisville N; Clay; 4N; 6E	Aux Vases, Mis	2,755	1953	20	abd 1956	2
944	Lynchburg; Jefferson; 3S; 4E	McClosky, Mis	3,045	1951	60	10	244
945	McKinley; Washington; 3S; 4W			1940	290	49	647
946		Cypress, Mis	1,060	1958	10	x	x
947		Bethel, Mis	1,000		150	x	x
948		Silurian, Sil	2,240		200	x	x
949	Main C;† Crawford, Jasper, Lawrence; 5-8N; 10-14W			1906	85,500	3,520	182,096
950		Cuba, Pen	510		x	x	x
951		Unnamed, Pen	750		40	x	x
952		Robinson, Pen	950		x	x	x
953		Pennsylvanian, Pen	1,250		x	x	x
954		Cypress, Mis	1,480		x	x	x
955		Paint Creek, Mis*	1,280		x	x	x
956		Bethel, Mis	1,400		x	x	x
957		Aux Vases, Mis	1,430		x	x	x
958		Rosiclare, Mis	1,515		x	x	x
959		McClosky (Oblong), Mis	1,400		x	x	x
960		Salem, Mis	1,815		x	x	x
961		Devonian, Dev	2,795		x	x	x
962		2 or more pays					
963	Maple Grove C; Edwards, Wayne, 1-2N; 9-10E			1943	2,250	89	3,928
964		Aux Vases, Mis	3,145		290	x	x
965		Ohara, Mis	3,230		80	x	x
966		Rosiclare, Mis*	3,250		20	x	x
967		McClosky, Mis	3,260		2,040	x	x
968		2 or more pays					
969	Maple Grove S; Edwards; 1N; 10E	McClosky, Mis	3,250	1945	20	abd 1950	9
970	Marcoe; Jefferson; 3S; 2E	McClosky, Mis	2,745	1938	40	abd 1941	13

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thickness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandoned	Producing end of year								
4,194 1,388 x	19,247 x	5,275	128	74	2,202						St. P	5,190	901
		25	0	0	22					X	Mis	2,324	902
		0	0	0		x	x	S	4	X			903
		21	0	0		x	x	S	15	X			904
		1	0	0		x	x	S	8	X			905
		1	0	0		x	x	L	11	X			906
		2	0	0									907
		11	0	0	3					A	Mis	3,031	908
		1	0	0		x	x	S	10	AL			909
		10	0	0		x	x	L	8	AC			910
		2	0	0	0	x	x	L	4	MC	Mis	3,045	911
8	11	8	0	0	8	36	x	L	10	A	Dev	4,000	912
		18	0	0	0	23	0.24	S	x	D	St. P	3,000	913
27	x	50	0	2	35	36	x	S	15	ML	Ord	2,378	914
		37	0	0	26	x	x	S	7	ML	Mis	845	915
		9	0	0	8					X	Mis	3,420	916
		7	0	0		x	x	S	10	X			917
		1	0	0		x	x	L	4	X			918
		0	0	0		x	x	L	6	X			919
		1	0	0									920
		8	2	2	6	x	x	L	10	X	Mis	3,394	921
		2	0	0		x	x	L	6	X			922
		3	1	1		x	x	L	10	X			923
		4	1	1		x	x	L	4	X			924
		1	0	0									925
		12	0	0	8					A	Mis	3,389	926
		2	0	0		x	x	S	8	AL			927
		2	0	0		x	x	S	13	AL			928
		5	0	0		x	x	S	9	AL			929
		2	0	0		x	x	L	5	AC			930
		1	0	0									931
11,384	61,249	2,199	7	14	1,966	x	x	S	8	X	Mis	3,210	932
W		1,217	6	9		36	0.25	S	30	A	St. P	4,680	933
W		179	1	0		38	0.24	S	15	A			934
W		431	1	6		39	0.20	S	10	A			935
		2	1	0		37	0.17	S	6	AL			936
		1	0	0		x	x	L	4	AC			937
		1	0	0		x	x	S	9	AL			938
P		85	0	0		29	0.48	D	15	A			939
		0	0	0		x	x	L	12	A			940
		295	2	1									941
		2	0	0	0	x	x	S	10	ML	Mis	2,977	942
		3	1	0	3	x	x	L	8	AC	Mis	3,579	943
		30	2	0	18					D	Ord	3,983	944
		1	0	0		x	x	S	19	D			945
		17	2	0		44	0.18	S	5	D			946
		12	0	0		43	x	L	40	R			947
2,551	13,524	9,842	43	174	4,213								948
		74	0	x		32	x	S		ML	St. P	4,654	949
									x	ML			950
		4	1	0		x	x	S	5	ML			951
W		9,401	25	x		35	x	S	25	ML			952
		28	0	x		x	x	S	x	ML			953
		37	1	2		x	x	S	15	ML			954
		x	0	0		x	x	S	30	ML			955
		99	1	7		x	x	S	18	ML			956
		67	15	9		x	x	S	15	ML			957
		1	0	0		x	x	S	6	MC			958
		113	1	x		x	x	L	x	MC			959
		12	0	0		x	x	L	5	MC			960
		2	0	0		x	x	L	11	MC			961
		9	1	x									962
		103	0	2	66					A	Mis	3,385	963
24	156	20	0	0		37	x	S	15	A			964
		2	0	0		x	x	L	3	AC			965
		1	0	0		x	x	L	1	AC			966
W		76	0	2		37	x	L	6	A			967
		5	0	0									968
		1	0	0	0	x	x	L	10	MC	Mis	3,358	969
		2	0	0	0	23	0.54	L	15	MC	Mis	3,066	970

TABLE 10.—

Line no.	Pool; County; Twp.-Range	Pay zone		Year of discovery	Area proved (acres)	Oil production	
		Name, age and depth				Total primary and secondary	
						During 1959	To end of 1959
971	Marine; Madison; 4N; 6W	Devonian & Silurian	1,700	1943	3,100	224	10,262
972	Marion; Williamson; 9S; 3E	Aux Vases, Mis	2,385	1950	10	abd 1951	0.5
973	Marion E; Williamson; 9S; 3E	Bethel, Mis	2,295	1959	10	0.1	0.1
974	Markham City; Jefferson; 2-3S; 4E	Ste. Genevieve, Mis	3,070	1942	760	28	1,325
975	Markham City N; Jefferson, Wayne; 2S; 4-5E			1943	500	24	1,049
976		Aux Vases, Mis	2,950		80	x	x
977		McClosky, Mis	3,075		500	x	x
978	Markham City W; Jefferson; 2-3S; 4E			1945	620	136	2,022
979		Aux Vases, Mis	2,905		320	x	x
980		McClosky, Mis	3,035		380	x	x
981		2 or more pays		1907	1,700	x	x
982	Martinsville; Clark; 9-10N; 13-14W					See Clark Co. Div. for	
983		Shallow, Pen	255		50	x	x
984		Casey, Pen	500		380	x	x
985		Martinsville, Mis	480		800	x	x
986		Carper, Mis	1,340		1,040	x	x
987		Devonian, Dev	1,550		680	x	x
988		Trenton, Ord	2,700		20	x	x
989	Mason N; Effingham; 6N; 5E			1951	180	27	230
990		Bethel, Mis	2,290		100	x	x
991		Aux Vases, Mis*	2,355		10	x	x
992		Rosiclare, Mis	2,390		100	x	x
993		McClosky, Mis*	2,475		40	x	x
994		2 or more pays					
995	Massilon; Edwards, Wayne; 1S; 9-10E	Ohara, Mis	3,255	1946	120	abd 1953	91
996	Massilon S; Edwards; 1S; 10E	Ohara, Mis	3,315	1947	20	abd 1947	0.5
997	Mattoon; Coles; 11-12N; 7-8E			1939	5,360	277	13,483
998		Cypress, Mis	1,750		2,040	x	x
999		Aux Vases, Mis	1,900		200	x	x
1000		Rosiclare, Mis	1,950		3,940	x	x
1001		McClosky, Mis	2,010		20	x	x
1002		Carper, Mis	2,950		10	x	x
1003		2 or more pays					
1004	Maunie E; White; 6S; 11E	Aux Vases, Mis	2,870	1951	60	2	39
1005	Maunie N C; White; 5-6S; 10-11E, 14W			1941	1,920	abd 1952; rev 1955	3,083
1006		Pennsylvanian, Pen	1,320		10	x	x
1007		Waltersburg, Mis	2,305		100	x	x
1008		Tar Springs, Mis	2,350		110	x	x
1009		Hardinsburg, Mis*	2,565		10	x	x
1010		Paint Creek, Mis	2,830		40	x	x
1011		Bethel, Mis	2,820		400	x	x
1012		Renault, Mis	2,935		10	x	x
1013		Aux Vases, Mis	2,930		920	x	x
1014		Ohara, Mis	2,995		160	x	x
1015		Rosiclare, Mis	3,025		360	x	x
1016		McClosky, Mis	3,035		400	x	x
1017		2 or more pays					
1018	Maunie S C; White; 6S; 10-11E			1941	1,510	123	5,995
1019		Bridgeport, Pen	1,400		70	x	x
1020		Biehl, Pen	1,649	1959	10	x	x
1021		Degonia, Mis	1,900		90	x	x
1022		Palestine, Mis	2,010		480	x	x
1023		Waltersburg, Mis	2,210		20	x	x
1024		Tar Springs, Mis	2,270		520	x	x
1025		Cypress, Mis	2,590		270	x	x
1026		Bethel, Mis*	2,735		10	x	x
1027		Aux Vases, Mis	2,845	1941	120	x	x
1028		Rosiclare, Mis*	2,900		20	x	x
1029		McClosky, Mis	2,920		40	x	x
1030		2 or more pays					
1031	Mayberry; Wayne; 2-3S; 6E	McClosky, Mis	3,350	1941	240	4	327
1032	Mayberry N; Wayne; 2S; 6E	McClosky, Mis	3,330	1948	20	abd 1950	1
1033	Melrose; Clark; 9N; 13W	Isabel, Pen	840	1953	100	x	x
1034	Melrose S; Clark; 9N; 13W	Isabel, Pen	865	1953	10	abd 1959	0
1035	Miletus; Marion; 4N; 4E			1947	220	12	279
1036		Bethel, Mis	2,140		100	x	x
1037		Aux Vases, Mis	2,200		100	x	x
1038		McClosky, Mis	2,350		60	x	x
1039		2 or more pays					
1040	Mill Shoals; Hamilton, Wayne, White; 2-4S; 7-8E			1939	2,850	195	8,431

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.	
Secondary		1959				Gravity API.	Sulfur percent	Character	Av. thickness in ft.	Structure	Name	Depth of hole (ft.)		
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandoned	Producing end of year									
117 W W	408	146	0	0	135	34	0.28	L	20	R	Ord	2,619	971	
		1	0	0	0	40	x	S	5	X	Mis	2,560	972	
		1	1	0	1	x	x	S	8	X	Mis	2,642	973	
		19	0	2	7	38	0.08	L	10	A	Mis	3,215	974	
		18	0	0	9					A	Mis	3,169	975	
		4	0	0		x	x	S	6	AL			976	
		14	0	0		38	0.24	L	8	AC			977	
		36	0	0	31					A	Mis	3,182	978	
		16	0	0		38	x	S	15	AL			979	
		17	0	0		38	x	L	7	AC			980	
22 W W	x	3	0	0							D	St. P	3,411	981
		277	2	1	134									982
		9	0	0		x	x	S	x	D				983
		83	0	1		x	x	S	x	D				984
		24	0	0		x	x	L	x	D				985
		68	2	0		34	x	S	40	D				986
		43	0	0		x	x	L	x	D				987
		2	0	0		40	x	L	x	D				988
		13	3	0	13					A	Mis	2,553	989	
		7	0	0		38	x	S	13	AL				990
77 W W	532	1	0	0		x	x	S	5	AL				991
		4	2	0		x	x	L	18	AC				992
		2	1	0		x	x	L	5	AC				993
		1	0	0										994
		3	0	0	0	37	x	L	6	MC	Mis	3,472	995	
		1	0	0	0	x	x	L	9	MC	Mis	3,391	996	
		448	1	4	379						St. P	4,915	997	
		97	0	2		38	0.16	S	13	A				998
		5	0	0		38	x	S	15	AL				999
		236	1	2		38	0.21	S	12	A				1000
14 W W	x	1	0	0		38	x	L	5	AC				1001
		1	0	0		x	x	S	10	A				1002
		108	0	0										1003
		5	0	0	2	x	x	S	20	AF	Mis	3,032	1004	
		169	4	2	143									1005
		1	0	0		x	x	S	20	A	Mis	3,260	1006	
		9	0	0		x	x	S	12	AL				1007
		8	0	0		x	x	S	10	AL				1008
		1	0	0		x	x	S	10	A				1009
		2	0	0		x	x	S	13	AL				1010
W  W 81	1,670	24	0	0		37	x	S	13	AL				1011
		1	0	0		x	x	L	2	AC				1012
		74	3	0		35	x	S	13	AL				1013
		5	0	1		x	x	L	4	AC				1014
		10	1	2		x	x	L	6	AC				1015
		13	0	0		35	x	L	10	AC				1016
		20	0	1										1017
		142	1	0	91					A	Mis	3,160	1018	
		7	0	0		37	x	S	7	AL				1019
		1	1	0		x	x	S	x	AL				1020
W  P W		6	0	0		x	x	S	10	AL				1021
		39	0	0		38	x	S	17	AL				1022
		2	0	0		x	x	S	19	AL				1023
		43	0	0		38	x	S	16	AF				1024
		23	0	0		39	x	S	10	AL				1025
		1	0	0		x	x	S	x	AL				1026
		10	0	0		x	x	S	12	AL				1027
		1	0	0		x	x	L	8	AC				1028
		2	0	0		x	x	L	6	AC				1029
		10	0	0										1030
		7	0	0	2	39	0.16	L	8	AC	Dev	5,377	1031	
		1	0	0	0	x	x	L	2	X	Mis	3,463	1032	
		10	0	0	9	x	x	S	10	X	Pen	878	1033	
		1	0	1	0	x	x	S	7	X	Pen	880	1034	
		16	0	1	11					A	Dev	3,950	1035	
		7	0	0		36	x	S	7	A				1036
		5	0	1		36	x	S	7	A				1037
		1	0	1		36	x	L	5	A				1038
		3	0	1										1039
		21	334	237	6	0	175					A	Mis	4,311

TABLE 10.—

Line no.	Pool; County; Twp.—Range	Pay zone	Year of discovery	Area proved (acres)	Oil production		
		Name, age and depth			Total primary and secondary		
					During 1959	To end of 1959	
1041		Aux Vases, Mis	3,245	2,550	x	x	
1042		Ohara, Mis	3,320	160	x	x	
1043		Rosiclare, Mis	3,345	240	x	x	
1044		McClosky, Mis	3,375	740	x	x	
1045		Harrodsburg, Mis	4,110	40	x	x	
1046		2 or more pays					
1047	Mills Prairie; Edwards; 1N; 14W	Ohara, Mis	2,925	1948	20	abd 1952	2
1048	Mills Prairie N; Edwards; 1N; 14W	Ohara, Mis	2,925	1953	40	abd 1956	5
1049	Mitchellsville; Saline; 10S; 6E		1955	20	1		11
1050		Degonia, Mis	1,330	10	x		x
1051		Waltersburg, Mis	1,505		10	1	11
1052	Mt. Auburn C; Christian; 15N; 1-2W	Silurian; Sil	1,890	1943	5,180	1,033	2,739
1053	Mt. Carmel;‡ Wabash; 1N, 1S; 12W			1940	4,530	330	12,203
1054		Bridgeport, Pen	1,370		60	x	x
1055		Biehl, Pen	1,470		700	x	x
1056		Jordan, Pen	1,520		50	x	x
1057		Palestine, Mis	1,580		40	x	x
1058		Waltersburg, Mis*	1,690		10	x	x
1059		Tar Springs, Mis	1,790		300	x	x
1060		Jackson, Mis*	2,020		10	x	x
1061		Cypress, Mis	2,025		3,380	x	x
1062		Paint Creek, Mis	2,095		40	x	x
1063		Bethel, Mis	2,110		60	x	x
1064		Ohara, Mis	2,320		260	x	x
1065		Rosiclare, Mis	2,350		240	x	x
1066		McClosky, Mis	2,360		1,300	x	x
1067		2 or more pays					
1068	Mt. Erie N; Wayne; 1N; 9E	Aux Vases, Mis	3,110	1944	180	3	378
1069		Ohara, Mis	3,170		50	x	x
1070					40	x	x
1071		McClosky, Mis	3,240		100	x	x
1072	Mt. Olive;† Montgomery; 8N; 5W	Pottsville, Pen	605	1942	50	x	x
1073	Mt. Vernon; Jefferson; 3S; 3E			1943	230	10	353
1074		Aux Vases, Mis	2,665		50	1	x
1075		Ohara, Mis*	2,750		20	0	x
1076		McClosky, Mis	2,800		180	9	x
1077		2 or more pays					
1078	Mt. Vernon N; Jefferson; 2S; 3E	McClosky, Mis	2,675	1956	40	6	31
1079	Murdock; Douglas; 16N; 10E	Pennsylvanian, Pen	370	1955	10	abd 1957	x
1080	Nason; Jefferson; 3S; 2E	Rosiclare, Mis	2,790	1943	20	1	29
1081	New Baden E; Clinton; 1N; 5W	Silurian, Sil	1,935	1958	100	20	20
1082	New Bellair; Crawford; 8N; 13W			1942	50	x	10
1083		Isabel, Pen	650		abd 1948; rev	20	abd 1954;
1084		Pennsylvanian, Pen	1,165		20	x	10
1085		Aux Vases, Mis	1,280		10	0	x
1086	New City; Sangamon; 14N; 4W	Silurian, Sil	1,730	1954	80	7	48
1087	New Douglas S; Bond; 6N; 5W	Pennsylvanian, Pen	640	1957	20	1	3
1088	New Harmony C;‡ Edwards, Wabash, White; 1N, 1-5S; 13-14W			1939	24,300	4,711	99,768
1089		Jamestown, Pen	720		x	x	x
1090		Mansfield, Pen*	x		x	x	x
1091		Bridgeport, Pen	1,340		x	x	x
1092		Biehl, Pen	1,850		x	x	x
1093		Jordan, Pen*	1,760		x	x	x
1094		Degonia, Mis	1,925		x	x	x
1095		Clare, Mis	1,980		x	x	x
1096		Palestine, Mis	2,000		230	x	x
1097		Waltersburg, Mis	2,155		860	x	x
1098		Tar Springs, Mis	2,215		1,470	x	x
1099		Hardinsburg, Mis*	2,290	1958	10	x	x
1100		Cypress, Mis	2,570		8,120	x	x
1101		Paint Creek, Mis	2,660		x	x	x
1102		Bethel, Mis	2,700		x	x	x
1103		Aux Vases, Mis	2,800		5,260	x	x
1104		Ohara, Mis	2,900		x	x	x
1105		Rosiclare, Mis	2,910		x	x	x
1106		McClosky, Mis	2,925		x	x	x
1107		Salem, Mis	3,364	1959	20	x	x
1108		Harrodsburg, Mis	3,755		60	x	x
1109		2 or more pays					
1110	New Harmony S (Ill.); White; 5S; 14W			1941	90	0.5	80

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

‡Illinois portion only.

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thick-ness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandon-ed	Producing end of year								
W		181	2	0		40	0.14	S	11	A			1041
		4	1	0		x	x	OL	11	AC			1042
		9	2	0		x	x	LS	8	AC			1043
		30	1	0		38	x	OL	5	AC			1044
		1	1	0		x	x	L	10	A			1045
		14	1	0									1046
		1	0	0	0	x	x	L	5	MC	Mis	3,010	1047
		2	0	0	0	x	x	L	5	MC	Mis	3,003	1048
		2	0	0	2					X	Mis	2,452	1049
		1	0	0		x	x	S	6	X			1050
130	1,148	1	0	0		x	x	S	9	X			1051
		244	78	17	217	37	0.28	L	15	MU	Tren	2,560	1052
		447	1	7	294					A	Dev	4,237	1053
		5	0	0		34	x	S	20	AL			1054
		46	0	1		37	0.28	S	20	AL			1055
		2	0	0		x	x	S	15	AL			1056
		3	0	0		x	x	S	10	AL			1057
		1	0	0		36	x	S	10	AL			1058
W		18	1	0		36	x	S	13	AL			1059
		1	0	0		x	x	S	25	AL			1060
W, P		260	0	5		36	0.17	S	15	AL			1061
		3	0	0		x	x	S	7	AL			1062
		3	0	0		36	x	S	16	AL			1063
		9	0	1		36	x	OL	5	AC			1064
W		6	0	0		37	0.26	S	5	AL			1065
		45	0	0		37	0.42	OL	6	AC			1066
		47	0	0									1067
		11	0	1	4					M	Mis	3,354	1068
		4	0	0		x	x	S	8	ML			1069
		2	0	1		x	x	L	6	MC			1070
		5	0	0		37	x	L	5	MC			1071
		5	0	0	0	33	0.16	S	6	A	Dev	1,819	1072
		10	0	1	3					A	Mis	3,009	1073
		5	0	1		x	x	S	8	A			1074
		1	0	0		x	x	L	6	AC			1075
		4	0	0		39	0.18	L	7	AC			1076
		1	0	0									1077
		2	0	0	2	x	x	L	6	X	Mis	2,726	1078
		1	0	0	0	x	x	S	16	X	Pen	395	1079
		1	0	0	1	x	x	S	12	ML	Mis	3,925	1080
rev 1956		5	4	0	5	x	x	L	15	R	Sil	2,200	1081
		5	1	0	2					M	Dev	2,801	1082
		2	1	0		x	x	S	3	ML			1083
		2	0	0		29	0.30	S	10	ML			1084
		1	0	0		x	x	S	20	M			1085
		4	1	1	2	x	x	L	11	MU	Sil	1,855	1086
	2	0	0	1	x	x	S	7	X	Pen	705	1087	
3,064	15,417	2,192	38	40	1,641						Shak	7,682	1088
		2	0	0		32	x	S	13	A			1089
		0	0	0		x	x	S	x	AL			1090
W		3	0	1		x	x	S	7	AL			1091
		79	1	1		37	x	S	20	AL			1092
		0	0	0		x	x	S	x	AL			1093
		4	0	0		38	x	S	10	AL			1094
		3	0	0		x	x	S	10	AL			1095
		17	1	1		x	x	S	10	AL			1096
W		33	0	0		34	0.40	S	20	AL			1097
W		117	12	0		35	0.19	S	26	ALf			1098
		1	0	0		x	x	L	10	ALf			1099
W, P		570	7	13		35	x	S	20	ALf			1100
W		21	1	0		x	x	S	20	ALf			1101
W		514	13	21		34	0.24	S	27	ALf			1102
W		309	7	3		34	0.19	S	15	ALf			1103
		24	0	0		x	x	OL	6	AC			1104
		17	1	0		x	x	LS	10	AC			1105
W		169	1	6		35	0.33	OL	8	AC			1106
		1	1	0		x	x	L	16	AC			1107
		3	0	0		x	x	L	6	AC			1108
		362	6	6									1109
		8	0	0	1					A	Mis	3,207	1110

TABLE 10.—

Line no.	Pool; County; Twp.—Range	Pay zone		Year of discovery	Area proved (acres)	Oil production	
		Name, age and depth	Total primary and secondary				
			During 1959			To end of 1959	
1111		Waltersburg, Mis	2,250		20	x	x
1112		Tar Springs, Mis	2,350		10	x	x
1113		Cypress, Mis	2,670		10	0	0
1114		Bethel, Mis	2,815		20	0	x
1115		Aux Vases	3,005		10	0	2
1116		McClosky, Mis	3,010		40	x	x
1117		2 or more pays					
1118	New Harmony S (Ind.);‡ White; 5S; 14W	Degonia, Mis*	1,850	1946	60	x	446
1119		Palestine, Mis	1,955		20	x	x
1120					30	x	x
1121		Waltersburg, Mis	2,120		30	x	x
1122		2 or more pays					
1123	New Haven C;‡ White; 7S; 10-11E			1941	440	109	1,353
1124		Tar Springs, Mis	2,105		130	x	x
1125		Hardinsburg, Mis	2,245		10	x	x
1126		Cypress, Mis	2,445		200	x	x
1127		Aux Vases, Mis	2,720		70	x	x
1128		Ohara, Mis	2,799	1959	40	x	x
1129		McClosky, Mis	2,820		100	x	x
1130		2 or more pays					
1131	New Hebron E; Crawford; 6N; 12W	Aux Vases, Mis	1,555	1954	40	x	0.5
1132	New Memphis; Clinton; 1N, 1S; 5W	Silurian, Sil	1,980	1952	760	124	1,424
1133	New Memphis E; Washington; 1S; 4W	Devonian, Dev	2,170	1957	40	2	4
1134	New Memphis N; Clinton; 1N; 5W	Devonian-Silurian	2,050	1954	80	2	23
1135	New Memphis S; Clinton, Washington; 1S; 5W	Silurian, Sil	2,000	1952	40	0	1
1136	Newton; Jasper; 6N; 9E	Ste. Genevieve, Mis	2,950	1944	80	abd 1952; rev 1956	3
1137	Newton N; Jasper; 7N; 10E	McClosky, Mis	2,855	1945	20	abd 1948	7
1138	Newton W; Jasper; 6-7N; 9E	McClosky, Mis	3,000	1947	60	abd 1953	1
1139	Noble W; Clay; 3N; 8E	McClosky, Mis	3,035	1951	20	0.4	9
1140	Oakdale; Jefferson; 2S; 4E			1956	200	abd 1959	41
1141							278
1141		Aux Vases, Mis	2,860		160	x	x
1142		McClosky, Mis	2,985		60	x	x
1143		2 or more pays					
1144	Oakley; Macon; 16N; 3E	Cedar Valley, Dev	2,285	1954	140	3	19
1145	Oak Point; Clark, Jasper; 8-9N; 14W			1952	710	19	293
1146		Isabel, Pen	560		10	0	0
1147		Aux Vases, Mis	1,185		680	19	293
1148		Carper, Mis	2,220		20	0	x
1149	Oak Point W; Clark, Cumberland; 9N; 11E, 14W	Aux Vases, Mis	1,190	1955	90	1	11
1150	Odin; Marion; 2N; 1-2E			1945	290	37	1,688
1151		Cypress, Mis	1,750		290	30	1,670
1152		McClosky, Mis	2,085		20	7	18
1153	Okawville; Washington; 1S; 4W	Silurian, Sil	2,325	1951	80	3	43
1154	Okawville N; Washington; 1S; 4W	Silurian, Sil	2,235	1955	80	3	19
1155	Old Ripley; Bond; 5N; 4W	Pennsylvanian, Pen	60	1954	760	40	221
1156	Olney C; Jasper, Richland; 4-5N; 10E			1938	4,130	246	6,472
1157		Ohara, Mis	3,005		x	x	x
1158		Rosiclare, Mis	3,050		x	x	x
1159		McClosky, Mis	3,100		x	x	x
1160		2 or more pays					
1161	Olney S; Richland; 3N; 10E			1937	990	39	778
1162		Rosiclare, Mis	3,100		720	x	x
1163		McClosky, Mis	3,115		650	x	x
1164		2 or more pays					
1165	Omaha;† Gallatin; 7-8S; 8E			1940	1,330	305	3,351
1166		Jake Creek, Pen	385		210	x	x
1167		Pennsylvanian, Pen	580		40	x	x
1168		Biehl, Pen	1,335		70	x	x
1169		Palestine, Mis	1,700		370	x	x
1170		Tar Springs, Mis	1,900		90	x	x
1171		Cypress, Mis	2,402	1959	10	x	x
1172		Bethel, Mis*	2,570		30	x	x
1173		Aux Vases, Mis	2,730		550	x	x
1174		Ohara, Mis*	2,734	1958	140	x	x
1175		Rosiclare, Mis	2,722	1958	20	x	x
1176		2 or more pays					
1177	Omaha E; Gallatin; 8S; 8E			1946	160	13	38
1178		Cypress, Mis	2,530		30	2	10
1179		Aux Vases, Mis	2,790		10	0	0
1180		Ohara, Mis	2,855		60	0	11

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

‡Illinois portion only.

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thick-ness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandon-ed	Producing end of year								
		2	0	0		x	x	S	18	AF			1111
		1	0	0		x	x	S	16	AF			1112
		1	0	0		x	x	S	8	Af			1113
		1	0	0		x	x	S	10	Af			1114
		1	0	0		x	x	S	7	AF			1115
		1	0	0		x	x	L	5	AF			1116
		1	0	0									1117
		6	0	0	4			S	8	T	Mis	3,068	1118
		0	0	0		x	x	S		TF			1119
		1	0	0		x	x	S	10	TF			1120
		3	0	0		x	x	S	30	TF			1121
		2	0	0									1122
84 W	445	35	4	0	33			S		A	Mis	2,980	1123
		8	0	0		36	0.27	S	12	Af			1124
		1	0	0		36	x	S	8	Af			1125
W		11	0	0		36	x	S	12	Af			1126
		4	0	0		36	x	S	15	Af			1127
		2	2	0		x	x	L	12	A			1128
		3	2	0		36	x	OL	6	AC			1129
		6	0	0									1130
		4	0	1	1	x	x	S	4	X	Mis	1,571	1131
		36	0	0	36	x	x	L	x	R	Sil	2,240	1132
		2	1	0	2	x	x	L	12		Ord	3,070	1133
		4	1	0	4	x	x	L	15	X	Ord	2,915	1134
		2	0	0	1	27	x	L	25	X	Ord	2,914	1135
		4	0	0	2	x	x	L	6	MC	Mis	3,040	1136
		1	0	0	0	x	x	L	5	MC	Mis	2,889	1137
		3	0	0	0	x	x	L	7	MC	Mis	3,102	1138
		1	0	1	0	x	x	L	8	X	Mis	3,149	1139
		11	0	0	11					X	Mis	3,767	1140
		8	0	0		x	x	S	35	X			1141
		2	0	0		x	x	L	5	X			1142
		1	0	0									1143
6	6	7	0	0	3	x	x	L	5	X	Dev	2,321	1144
		53	0	12	36					M	Dev	2,691	1145
		1	0	0		x	x	S	10	ML			1146
W		51	0	12		x	x	S	17	X			1147
		1	0	0		x	x	L	x	ML			1148
29	1,262	8	0	0	8	x	x	S	8	X	Mis	1,560	1149
		30	0	0	29					A	Dev	3,597	1150
W		29	0	0		38	x	S	13	AL			1151
		4	0	0		x	x	L	12	A			1152
		4	0	0	4	x	x	L	3	R	Sil	2,603	1153
x	x	67	2	0	6	41	x	L	x	X	Sil	2,498	1154
116	433	157	0	1	65	x	x	S	17	A	Dev	2,221	1155
W		14	0	2	92					A	Mis	3,289	1156
		23	0	0		37	0.19	L	6	A			1157
		116	0	1		37	0.19	L	5	A			1158
W		4	0	2		37	0.19	L	6	A			1159
				1									1160
		47	1	5	33					M	Dev	4,910	1161
		16	0	1		x	x	L	4	MC			1162
		13	1	5		x	x	L	3	MC			1163
		17	0	1									1164
62	6,247	122	25	1	110					D	Mis	3,408	1165
		15	0	0		x	x	S	20	D			1166
		5	0	0		x	x	S	10	D			1167
		5	0	0		x	x	S	10	D			1168
P		25	1	0		27	0.24	S	15	D			1169
		7	0	0		x	x	S	15	D			1170
		1	1	0		x	x	S	12	D			1171
		2	1	0		x	x	S	14	D			1172
		54	15	1		x	x	S	20	D			1173
		10	8	0		x	x	L	14	D			1174
		2	0	0		x	x	S	8	D			1175
		5	1	0									1176
		10	2	0	7					M	Mis	3,000	1177
		3	0	0		x	x	S	6	M			1178
		1	0	0		x	x	M	x	M			1179
		3	1	0		37	x	L	8	MCf			1180

TABLE 10.—

Line no.	Pool; County; Twp.-Range	Pay zone		Year of discovery	Area proved (acres)	Oil production	
		Name, age and depth	Total primary and secondary				
			During 1959			To end of 1959	
1181	Omaha S; Gallatin, Saline; 8S; 7-8E	McClosky, Mis	2,884	1958	60	x	x
1182				1951	90	0.5	23
1183		Cypress, Mis	2,535		60	0.5	18
1184		Aux Vases, Mis	2,870		10	0	0
1185		Rosiclare, Mis	2,865		20	0	5
1186	Omaha W; Saline; 7-8S; 7E			1950	80	11	149
1187		Cypress, Mis	2,600		50	x	x
1188		Aux Vases, Mis	2,800		20	x	x
1189		McClosky, Mis	2,910		20	0	1
1190		2 or more pays					
1191	Omega; Marion; 3N; 4E	McClosky, Mis	2,490	1946	40	abd 1949	5
1192	Orchardville; Wayne; 1N; 5E			1950	110	4	108
1193		Aux Vases, Mis	2,800		70	4	81
1194		Ohara, Mis	2,880		20	0.5	5
1195		McClosky, Mis	2,905		40	0	23
1196	Orchardville N; Wayne; 1N; 5E	Paint Creek, Mis	2,655	1956	10	2	9
1197	Oskaloosa; Clay; 3-4N; 5E			1950	380	147	1,904
1198		Bethel, Mis	2,595		360	x	x
1199		Aux Vases, Mis	2,643	1958	50	x	x
1200		McClosky, Mis	2,755		100	x	x
1201	Oskaloosa E; Clay; 3N; 5-6E	2 or more pays					
1202				1947	40	abd 1954	35
1203		Aux Vases, Mis	2,820		20	0	7
1204		McClosky, Mis	2,895		20	0	28
1205		McClosky, Mis	2,770	1951	60	2	25
1206	Pana; Christian; 11-12N; 1E	Bethel, Mis	1,470	1951	60	5	65
1207	Panama;† Bond, Montgomery; 7N; 3-4W			1940	60	1	18
1208		Golconda, Mis	705		40	0.5	8
1209		Bethel, Mis	865		20	0.5	10
1210	Pankeyville; Saline; 9S; 6E	Cypress, Mis	2,250	1956	30	abd 1957	6
1211	Pankeyville E; Saline; 9S; 7E			1956	10	abd 1957	0
1212		Cypress, Mis*	2,250		10	0	0
1213		Bethel, Mis*	2,360		10	0	0
1214		2 or more pays					
1215							
1216	Parkersburg C; Edwards, Richland; 1-3N; 10-11E, 14W	Waltersburg, Mis	2,430	1941	6,320	148	10,043
1217		Cypress, Mis	2,830		90	x	x
1218		Paint Creek, Mis	2,955		160	x	x
1219		Bethel, Mis	2,930		70	x	x
1220		Aux Vases, Mis	3,070		140	x	x
1221	Parkersburg S; Edwards; 1N; 14W				10	x	x
1222		Ohara, Mis	3,100		x	x	x
1223		Rosiclare, Mis	3,150		x	x	x
1224		McClosky, Mis	3,175		5,020	x	x
1225		2 or more pays					
1226	Parkersburg W; Edwards, Richland; 2N; 10E	Pennsylvanian, Pen	1,400	1948	80	2	62
1227		Bethel, Mis	2,815		60	2	47
1228					20	0.5	14
1229		Ohara, Mis	3,220	1943	380	15	225
1230		McClosky, Mis	3,260		40	0	x
					340	15	x
1231	Passport; Clay; 4-5N; 8E			1945	1,060	89	2,336
1232		Rosiclare, Mis	3,005		40	0	x
1233		McClosky, Mis	3,020		1,060	89	x
1234		2 or more pays					
1235		Aux Vases, Mis	2,940	1959	10	8	8
1236	Passport N; Richland; 5N; 9E			1948	120	9	117
1237	Passport S; Richland; 4N; 8-9E	Cypress, Mis	2,665		70	5	69
1238		Rosiclare, Mis	3,025		20	0	19
1239		McClosky, Mis	3,030		20	4	28
1240	Passport W; Clay; 4N; 8E	Ste. Genevieve, Mis	3,030	1954	180	2	59
1241	Patoka; Clinton, Marion; 3-4N; 1E, 1W			1937	1,830	230	12,548
1242		Cypress, Mis*	1,280		60	x	x
1243		Bethel, Mis	1,410		1,040	x	x
1244		Rosiclare, Mis	1,550		500	x	x
1245		Geneva, Dev	2,835		20	x	x
1246	Patoka E; Marion; 4N; 1E	Trenton, Ord	3,950		740	x	x
1247		2 or more pays					
1248				1941	600	69	4,285
1249		Cypress, Mis	1,340		500	x	x
1250		Bethel, Mis	1,465		60	x	x

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thick-ness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandon-ed	Producing end of year								
		3	1	0	2	x	x	L	10	MCf	Mis	3,035	1181
		7	0	0						N			1182
		5	0	0		x	x	S	15	NL			1183
		1	0	0		x	x	S	11	N			1184
		1	0	0		x	x	L	1	NC			1185
		7	1	0	5					A	Mis	3,025	1186
		4	0	0		x	x	S	14	AL			1187
		2	1	0		x	x	S	30	AL			1188
		1	0	0		x	x	L	8	AC			1189
		1	0	0									1190
		2	0	0	0	x	x	L	10	D	Mis	2,584	1191
		9	0	0	8					A	Mis	3,000	1192
		6	0	0		x	x	S	16	AL			1193
		1	0	0		x	x	L	3	AC			1194
		2	0	0		x	x	L	5	AC			1195
		1	0	0	1	x	x	S	6		Dev	4,684	1196
		37	0	0	34					A	Mis	2,961	1197
		36	0	2		38	x	S	15	A			1198
		5	2	0		x	x	S	x	A			1199
		5	1	0		x	x	L	5	A			1200
		4	1	0									1201
		3	0	0	0								1202
		2	0	0		x	x	S	5	AL	Mis	3,050	1203
		1	0	0		x	x	L	4	AC			1204
		3	0	0	2	x	x	L	4	AC			1205
		5	0	0	5	x	x	S	8	X	Mis	2,883	1206
		6	0	0	4					A	Dev	2,847	1207
		4	0	0		x	x	L	12	A			1208
		2	0	0		x	x	S	12	A			1209
		2	0	0	0	x	x	S	x	X	Mis	2,742	1210
		1	0	0	0								1211
		0	0	0	0	x	x	S	x	X	Mis	2,604	1212
		0	0	0	0	x	x	S	13	X			1213
		1	0	0									1214
68 W	447	278	0	13	135					A	Mis	3,333	1215
		9	0	0		x	x	S	10	A			1216
		8	0	0		x	x	S	12	A			1217
		2	0	0		x	x	S	17	A			1218
		4	0	0		x	x	S	12	A			1219
		1	0	0		x	x	S	20	A			1220
		2	0	0		x	x	L	10	A			1221
		42	0	6		37	0.34	L	10	A			1222
		185	0	8		38	0.31	OL	10	A			1223
		25	0	1									1224
		8	0	0	5					X	Mis	3,187	1225
		6	0	0		x	x	S	10	X			1226
		2	0	0		x	x	S	5	X			1227
		17	2	0	11					A	Mis	3,331	1228
		1	0	0		x	x	L	5	AC			1229
		16	2	0		37	x	L	6	AC			1230
58 W	64	57	0	1	38					A	Mis	3,140	1231
		1	0	0		x	x	L	5	AC			1232
		55	0	1		37	x	L	10	A			1233
		1	0	0									1234
		1	1	0	1	x	x	S	10	X	Mis	3,091	1235
		8	0	0	6					A	Mis	3,692	1236
		6	0	0		x	x	S	15	AL			1237
		1	0	0		x	x	L	6	AC			1238
		1	0	0		x	x	L	8	AC			1239
		10	0	1	5	x	x	L	5	AC	Mis	3,130	1240
69 W	7,841	219	9	0	125					D	Ord	4,056	1241
		0	0	0		39	x	S	10	D			1242
		174	9	0		39	0.16	S	27	D			1243
		8	0	0		39	0.31	S	9	D			1244
		1	0	0		40	0.28	D	10	D			1245
		34	0	0		39	x	L	25	D			1246
		2	0	0									1247
		64	0	1	48					D	Ord	4,178	1248
		54	0	1		36	0.18	S	16	D			1249
		5	0	0		36	0.23	S	10	D			1250

TABLE 10.—

Line no.	Pool; County; Twp.—Range	Pay zone		Year of discovery	Area proved (acres)	Oil production	
		Name, age and depth				Total primary and secondary	
						During 1959	To end of 1959
1251	Patoka S; Marion; 3N; 1E	McClosky, Mis	1,635	1953	80	x	x
1252		Geneva, Dev	2,950		40	x	x
1253					490	119	538
1254		Cypress, Mis	1,350		390	x	x
1255		Bethel, Mis	1,461		1959	80	x
1256	Patoka W; Fayette; 4N; 1W Phillipstown C; Edwards, White; 3-5S; 10-11E, 14W	Rosiclare, Mis	1,624	1959	20	x	x
1257		Bethel, Mis	1,380	1950	180	13	260
1259							
1259		Anvil Rock, Pen	795	1939	6,210	671	18,323
1260		Clark-Bridgeport, Pen	1,350		10	x	x
					x	x	x
1261		Pennsylvanian, Pen	1,450		x	x	x
1262		Buchanan, Pen	1,550		x	x	x
1263		Biehl, Pen	1,875		x	x	x
1264		Degonia, Mis	1,975		480	x	x
1265		Clore, Mis	2,010		120	x	x
1266		Palestine, Mis	2,050		60	x	x
1267		Waltersburg, Mis	2,280		60	x	x
1268		Tar Springs, Mis	2,295		940	x	x
1269		Cypress, Mis	2,720		480	x	x
1270		Paint Creek, Mis	2,780		80	x	x
1271	Phillipstown S; White; 5S; 10E	Bethel, Mis	2,810		950	x	x
1272		Aux Vases, Mis	2,880		740	x	x
1273		Ohara, Mis	3,010		500	x	x
1274		Rosiclare, Mis	2,960		490	x	x
1275		McClosky, Mis	3,000		1,070	x	x
1276		2 or more pays					
1277				1951	40	x	x
1278		Tar Springs, Mis	2,345	1951	10	x	x
1279		Aux Vases, Mis	2,985	1951	10	x	x
1280		McClosky, Mis	3,065	1957	20	x	x
1281	Pinkstaff; Lawrence; 4N; 11W	McClosky, Mis	1,735	1951	20	abd 1951	0.1
1282	Pinkstaff E; Lawrence; 4N; 11W	McClosky, Mis	1,640	1955	20	x	x
1283	Pixley; Clay; 4N; 8E	Cypress, Mis	2,680	1959	20	x	x
1284	Plainview; Macoupin; 9N; 8W	Pennsylvanian, Pen	410	1942	10	0	2
1285	Plainview S; Macoupin; 8N; 8W	Pennsylvanian, Pen	444	1959	10	x	x
1286	Posen; Washington; 3S; 2W	Trenton, Ord	3,900	1952	80	5	60
1287	Posen N; Washington; 3S; 2W	Trenton, Ord	4,015	1953	10	abd 1959	4
1288	Posen S; Washington; 3S; 2W	Bethel, Mis	1,255	1955	40	x	x
1289	Posey; Clinton; 1N; 2W			1941	40	0.5	10
1290		Cypress, Mis	1,105	1941	20	x	x
1291	Posey E; Clinton; 1N; 2W	Devonian, Dev	2,675	1959	20	x	x
1292		Devonian-Silurian, Dev-Sil					
1293		Devonian, Dev	2,740	1952	400	83	120
1294		Prentice; Morgan; 16N; 8W	2,585	1954	10	abd 1954	1
1295		Raccoon Lake; Marion; 1N; 1E	270	1953	30	0	0
1296				1949	400	80	2,910
1297		Cypress, Mis	1,625		190	x	x
1297		Bethel, Mis*	1,715		20	x	x
1298		Ohara, Mis*	1,885		20	x	x
1299		Rosiclare, Mis	1,930		220	x	x
1300		McClosky, Mis	1,950		280	x	x
1301	Raleigh; Saline; 7-8S; 6E	Devonian-Silurian	3,330		300	x	x
1302		2 or more pays					
1303				1953	500	132	877
1304		Tar Springs, Mis*	2,235		10	x	x
1305		Cypress, Mis	2,550		380	x	x
1306		Paint Creek, Mis	2,738	1958	10	x	x
1307		Aux Vases, Mis	2,905		80	x	x
1308		Ohara, Mis	3,054	1959	20	x	x
1309		Rosiclare, Mis	3,025		20	2	12
1310		2 or more pays					
1311	Raleigh S; Saline; 8S; 6E			1955	310	143	669
1312		Waltersburg, Mis	2,046	1959	10	32	32
1313		Bethel, Mis*	2,739	1958	10	x	x
1314		Aux Vases, Mis	2,860	1955	300	x	x
1315		2 or more pays		1958			
1316	Raymond; Montgomery; 10N; 4-5W	Pottsville, Pen	590	1940	100	0.5	19
1317	Raymond E; Montgomery; 10N; 4W	Pennsylvanian, Pen	595	1951	60	1	22
1318	Raymond S; Montgomery; 10N; 4W	Unnamed, Pen	603	1959	10	abd 1959	0
1319	Reservoir; Jefferson			1950	240	9	261
1320		Rosiclare, Mis	2,443	1959	20	0	0

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.	
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thickness in ft.	Structure	Name	Depth of hole (ft.)		
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandoned	Producing end of year									
131	2,020	3	0	0	43	x	x	L	8	D	Mis	1,728	1251	
		2	0	0		x	x	D	30	R			1252	
		44	9	0		x	x			A			1253	
		35	0	0		x	x	S	10	A			1254	
		8	8	0	x	x	S	15		1255				
		1	1	0	x	x	S	5		1256				
		17	0	0	x	x	S	6	A	Mis	1,735	1257		
		490	7	10	374					A	Dev	5,350	1258	
		1	0	0	36	x	S	10	Af	1259				
		13	0	0	36	x	S	10	Af	1260				
W W W  W W		9	0	0	36	x	S	10	Af		1261			
		24	0	0	36	x	S	15	Af		1262			
		46	0	1	36	0.22	S	15	Af		1263			
		36	0	0	35	x	S	15	Af		1264			
		4	0	0	34	x	S	12	Af		1265			
		1	0	0	x	x	S	11	Af		1266			
		4	0	0	x	x	S	11	Af		1267			
		62	0	0	35	x	S	15	Af		1268			
		26	1	0	36	x	S	12	Af		1269			
		7	3	0	x	x	S	9	Af		1270			
W, P W		74	0	6	37	x	S	15	Af		1271			
		38	3	1	37	x	S	15	Af		1272			
		20	0	2	x	x	L	10	ACf		1273			
		17	1	2	38	x	LS	10	ACf		1274			
		45	0	0	36	0.21	L	6	ACf		1275			
		72	1	2							1276			
		3	0	1	x	x	S	10	Mf		Mis	3,161	1277	
		1	0	0	x	x	S	10	Mf		1278			
		1	0	0	x	x	S	10	Mf		1279			
		1	0	1	x	x	L	4	M		1280			
		1	0	0	0	x	x	L	4	X	Mis	1,797	1281	
		1	0	0	1	x	x	L	6	X	Mis	1,644	1282	
		2	2	0	2	x	x	S	9	X	Mis	3,121	1283	
		1	0	0	0	34	x	S	5	X	Pen	453	1284	
		1	1	0	1	x	x	S	8	X	Pen	458	1285	
		4	0	0	4	x	x	L	25	A	Ord	3,954	1286	
		1	0	1	0	x	x	L	15	AC	Ord	4,112	1287	
		4	0	2	0	x	x	S	2	X	Mis	1,300	1288	
		3	1	0	2					M	Sil	2,782	1289	
		2	0	0	36	0.18	S	5	M	1290				
		1	1	0		x	x	L	5	M		1291		
		18	11	0	18	x	x	L	8	X		Dev	2,805	1292
		1	0	0	0	x	x	L	15	X		Dev	2,604	1293
		3	0	0	0	x	x	S	10	X		Ord	1,513	1294
		47	0	0	36					D		Sil	3,530	1295
		18	0	0		x	x	S	10	D				1296
		2	0	0		x	x	S	15	DL				1297
		0	0	0		x	x	L	5	DC				1298
		3	0	0		x	x	S	12	DC				1299
		5	0	0		x	x	L	10	DC				1300
		15	0	0	45	x	x	D	10	R	Mis	3,188	1301	
		10	0	0									1302	
		46	5	1						A			1303	
		1	0	0		x	x	S	20	A			1304	
		34	0	0	x	x	S	12	A	1305				
		1	0	0	x	x	S	5	A	1306				
		8	4	0	x	x	S	5	A	1307				
		1	1	1	x	x		3	A	1308				
		1	0	0	x	x	LS	10	A	1309				
		2	0	0							1310			
0.3	0.3	28	1	1	27					X	Mis	3,092	1311	
		1	1	0	x	x	S	10	X	1312				
		1	0	0	x	x	S	8	X	1313				
		27	0	1	x	x	S	16	X	1314				
		1	0	0								1315		
		10	0	0	2	35	0.22	S	10	ML	Dev	2,049	1316	
		5	0	0	4	x	x	S	10	X	Mis	1,008	1317	
		1	1	1	0	x	x	S	6	X	Pen	680	1318	
		12	1	1	8					MC	Mis	2,808	1319	
		1	1	1		x	x	S	7	M			1320	

TABLE 10.—

Line no.	Pool; County; Twp.—Range	Pay zone		Year of discovery	Area proved (acres)	Oil production		
		Name, age and depth	Total primary and secondary					
			During 1959			To end of 1959		
1321	Richview; Washington; 2S; 1W Ridgeway; Gallatin; 8S; 8E	McClosky, Mis	2,700	1950	220	9	261	
1322		Cypress, Mis	1,520	1946	40	1	15	
1323				1946	30	abd 1946; rev and abd 1956	0.1	
1324		Palestine; Mis	1,730		10	0	0	
1325		McClosky, Mis	2,840		20	0	0.1	
1326		Rifle; Clay; 4N; 6E	Rosiclare, Mis	2,735	1948	100	4	79
1327		Rinard; Wayne; 2N; 7E	McClosky, Mis	3,145	1937	20	abd 1942	7
1328		Rinard N; Wayne; 2N; 7E			1952	200	6	210
1329			Rosiclare, Mis	3,135		20	0	0
1330		McClosky, Mis	3,140		200	6	210	
1331	Ritter; Richland; 3N; 10-11E	Ste. Genevieve, Mis	3,215	1950	80	2	115	
1332	Ritter N; Richland; 3N; 11E			1951	140	34	71	
1333		Rosiclare, Mis	3,215	1952	100	30	31	
1334		McClosky, Mis	3,205	1951	40	4	41	
1335	Roaches; Jefferson; 2S; 1E			1938	200	6	609	
1336		Bethel, Mis*	2,000		30	x	x	
1337		Ohara, Mis	2,170		60	x	x	
1338		Rosiclare, Mis	2,190		160	x	x	
1339		McClosky, Mis	2,250		120	x	x	
1340		2 or more pays						
1341	Roaches N; Jefferson; 2S; 1E			1944	350	28	1,407	
1342		Bethel, Mis	1,925		350	x	x	
1343		Rosiclare, Mis	2,115		80	x	x	
1344		2 or more pays						
1345	Roby; Sangamon; 15N; 3W	Silurian, Sil	1,775	1949	100	11	37	
1346	Roby W; Sangamon; 15N; 3W	Hibbard, Dev	1,655	1957	20	0.5	2	
1347	Rochester; † Wabash; 2S; 13W			1948	280	51	1,009	
1348		Pennsylvanian, Pen	1,300		130	x	x	
1349		Waltersburg, Mis	1,940		190	x	x	
1350		2 or more pays						
1351	Roland C; † Gallatin; White; 5-7S; 8-9E			1940	9,040	1,813	37,589	
1352		Pennsylvanian, Pen	1,410		50	x	x	
1353		Degonia, Mis	2,065		10	x	x	
1354		Palestine, Mis	2,085		20	x	x	
1355		Waltersburg, Mis	2,200		2,010	x	x	
1356		Tar Springs, Mis	2,300		350	x	x	
1357		Hardinsburg, Mis	2,550		1,530	x	x	
1358		Golconda, Mis*	2,505		10	x	x	
1359		Cypress, Mis	2,700		1,470	x	x	
1360		Paint Creek, Mis	2,800		340	x	x	
1361		Bethel, Mis	2,800		1,120	x	x	
1362		Aux Vases, Mis	2,880		2,500	x	x	
1363		Ohara, Mis	3,020		600	x	x	
1364		Rosiclare, Mis	3,050		600	x	x	
1365		McClosky, Mis	3,070		1,700	x	x	
1366		St. Louis, Mis*	x		20	x	x	
1367		2 or more pays						
1368	Roland W; Saline; 7S; 7E	Aux Vases, Mis	2,935	1950	10	abd 1959	22	
1369	Ruark; Lawrence; 2N; 12-13W			1941	430	41	2,314	
1370		Pennsylvanian, Pen	1,600		310	x	x	
1371		Bethel, Mis	2,075		80	x	x	
1372		Aux Vases, Mis*	2,145		30	x	x	
1373		Ohara, Mis	2,275		20	0	0	
1374		2 or more pays						
1375	Ruark W C; Lawrence; 2N; 13W			1947	610	30	818	
1376		Waltersburg, Mis	1,780		50	x	x	
1377		Cypress, Mis*	2,165		10	x	x	
1378		Bethel, Mis	2,220		440	x	x	
1379		Ohara, Mis*	2,350		80	x	x	
1380		Rosiclare, Mis	2,390		40	x	x	
1381		McClosky, Mis	2,400		280	x	x	
1382		2 or more pays						
1383	Rural Hill N; Hamilton; 5S; 5E			1949	90	31	147	
1384		Cypress, Mis	2,930		60	x	x	
1385		Rosiclare, Mis	3,325		20	0	1	
1386	Russellville Gas; † Lawrence; 4-5N; 10-11W	McClosky, Mis*	1,560	1937	40	0	12	
1387	Russellville W; Lawrence; 5N; 11W	Rosiclare, Mis	1,565	1955	20	abd 1957	2	
1388	St. Francisville; Lawrence; 2N; 11W	Bethel, Mis	1,845	x	700	x	x	
1389	St. Francisville E; Lawrence; 2N; 11W			1941	290	64	427	
1390		Pennsylvanian, Pen	1,260		30	x	x	

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

‡Illinois portion only.

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thick-ness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandon-ed	Producing end of year								
		11	0	0		x	x	L	6	MC			1321
		4	0	1	1	x	x	S	7	AL	Mis	1,932	1322
		2	0	0	0					MC	Mis	2,938	1323
		1	0	0		x	x	S	18	ML			1324
		1	0	0		x	x	L	6	MC			1325
		5	0	0	1	x	x	L	7	MC	Mis	2,848	1326
		1	0	0	0	39	x	L	5	AC	Mis	3,280	1327
		10	0	1	3					M	Mis	3,280	1328
		1	0	1		x	x	L	6	MC			1329
		9	0	0		x	x	L	5	MC			1330
		5	0	0	1	x	x	L	5	X	Mis	3,925	1331
		7	5	0	6					X	Mis	3,288	1332
		5	4	0		x	x	L					1333
		2	1	0		x	x	L	5	X			1334
		13	0	0	3					A	Dev	3,840	1335
		0	0	0		x	x	S	x	AL			1336
		2	0	0		37	0.22	L	5	AC			1337
		5	0	0		37	0.22	L	12	AC			1338
		6	0	0		37	0.22	L	4	AC			1339
		3	0	0									1340
		34	0	0	25					A		2,283	1341
		32	0	1		x	x	S	7	A	Mis		1342
		2	1	0		x	x	L	8	AC			1343
		2	1	0									1344
		6	2	0	4	x	x	L	5	MU	Sil	1,822	1345
		1	0	0	1	x	x	S	5	MU	Tren	2,259	1346
		38	0	0	28					M	Mis	2,810	1347
		11	0	0		x	x	S	16	MCf			1348
		24	0	0		x	x	S	20	ML			1349
		3	0	0									1350
1,095	5,665	849	10	8	671					A	Dev	5,225	1351
		4	0	0		36	x	S	10	A			1352
		1	0	0		x	x	S	7	A			1353
		2	0	0		36	x	S	2	A			1354
W		113	1	0		38	0.25	S	15	AL			1355
		23	1	1		37	x	S	15	AL			1356
W		140	2	0		36	0.30	S	20	AL			1357
		0	0	0		x	x	S	5	A			1358
W		99	3	1		32	0.12	S	15	AL			1359
		20	1	1		36	x	S	12	AL			1360
		58	0	0		32	0.20	S	12	AL			1361
W		194	5	3		32	0.12	S	13	AL			1362
		15	0	2		36	x	OL	6	AC			1363
		15	0	0		37	x	L	6	AC			1364
		62	0	1		37	0.20	L	6	AC			1365
		0	0	0		x	x	L	x	AC			1366
		110	1	0									1367
		1	0	1	0	x	x	S	15	ML	Mis	3,161	1368
		42	1	1	30					A			1369
		32	0	0		33	x	S	10	AL		2,442	1370
		6	0	1		x	x	S	11	AL			1371
		2	0	0		x	x	S	7	AL			1372
		1	0	0		x	x	L	5	AC			1373
		1	0	0									1374
		56	0	0	50					M	Mis	2,633	1375
		6	0	0		x	x	S	10	ML			1376
		0	0	0		x	x	S	9	ML			1377
		33	0	0		x	x	S	20	ML			1378
		0	0	0		x	x	L	5	MC			1379
		1	0	0		x	x	L	5	MC			1380
		5	0	0		x	x	L	3	MC			1381
		11	0	0									1382
		8	1	0	7					M	Mis	3,468	1383
		7	1	0		x	x	S	10	ML			1384
		1	0	0		x	x	L	8	MC			1385
		0	0	0	0	x	x	L	7	AC	Dev	3,133	1386
		1	0	0	0	x	x	L	22	X	Mis	1,646	1387
		82	0	1	42	32	x	S	6	ML	Mis	2,164	1388
for production													
55	77	26	4	0	25					A	Mis	1,960	1389
		3	0	0		x	x	S	8	AL			1390

TABLE 10.—

Line no.	Pool; County; Twp.—Range	Pay zone		Year of discovery	Area proved (acres)	Oil production	
		Name, age and depth	Total primary and secondary				
			During 1959			To end of 1959	
1391		Waltersburg, Mis	1,300		10	x	x
1392		Hardinsburg, Mis	1,460		40	x	x
1393		Cypress, Mis	1,605		10	x	x
1394		Bethel, Mis	1,750		270	x	x
1395	St. Jacob; Madison; 3N; 6W	Trenton, Ord	2,260	1942	1,120	51	2,963
1396	St. Jacob E; Madison; 3N; 6W	Hardin, Dev	1,840	1955	20	abd 1957	1
1397	St. James; Fayette; 5-6N; 2-3E			1938	1,920	359	14,808
1398		Golconda, Mis*	1,555		10	0	x
1399		Cypress, Mis	1,580		1,880	x	x
1400		Bethel, Mis	1,746	1959	10	x	x
1401		Rosiclare, Mis	1,860		190	x	x
1402		2 or more pays					
1403	St. Paul; Fayette; 5N; 3E			1941	260	11	600
1404		Bethel, Mis	1,900		240	11	600
1405		Rosiclare, Mis	2,080		20	0	0
1406	Ste. Marie; Jasper; 5N; 10-11E, 14W	Ste. Gen, Mis	2,900	1941	1,280	153	1,185
1407	Ste. Marie E; Jasper; 6N; 14W	McClosky, Mis	2,685	1949	80	abd 1951	1
1408	Ste. Marie W; Jasper; 5-6N; 10E			1949	220	16	212
1409		Aux Vases, Mis*	2,720	1949	10	x	x
1410		McClosky, Mis	2,815		220	x	x
1411	Sailor Springs Cen; Clay; 3-4N, 7-8E			1948	70	0.5	5
1412		Tar Springs, Mis	2,330		abd 30	1955; rev 1957	
1413		Rosiclare, Mis	3,015		40	0	0.5
1414	Sailor Springs C; Clay, Effingham; 3-6N; 6-8E			1938	14,890	1,384	32,242
1415		Tar Springs, Mis	2,340		710	x	x
1416		Glen Dean, Mis*	2,390		10	x	x
1417		Cypress, Mis	2,550		8,560	x	x
1418		Bethel, Mis	2,740		360	x	x
1419		Aux Vases, Mis	2,825		980	x	x
1420		Ohara, Mis	2,900		280	x	x
1421		Rosiclare, Mis	2,900		1,820	x	x
1422		McClosky, Mis	2,925		4,200	x	x
1423		2 or more pays					
1424	Sailor Springs E; Clay; 4N; 8E			1944	130	0	64
1425		Cypress, Mis	2,695		abd 90	1952; rev 1955; abd 1956	
1426		McClosky, Mis	3,020		40	0	62
1427	Sailor Springs N; Clay; 4N; 8E			1948	100	0	5
						abd 1949; rev 1950; abd 1951; rev 1955; abd 1956; rev 1957	
1428		Rosiclare, Mis	2,985		60	x	x
1429		McClosky, Mis	3,030		80	x	x
1430		2 or more pays					
1431	Salem C; Jefferson, Marion; 1-2N; 1S; 1-2E			1938	14,600	7,169	271,744
1432		Bethel, Mis	1,780		x	x	x
1433		Renault, Mis*	x		x	x	x
1434		Aux Vases, Mis	1,825		x	x	x
1435		Ohara, Mis	2,075		x	x	x
1436		Rosiclare, Mis	2,100		x	x	x
1437		McClosky, Mis	2,050		x	x	x
1438		St. Louis, Mis*	2,100		x	x	x
1439		Salem, Mis	2,160		x	x	x
1440		Devonian, Dev	3,440		5,860	x	x
1441		Trenton, Ord	4,500		2,180	x	x
1442		2 or more pays					
1443	Samsville; Edwards; 1N; 11E	Waltersburg, Mis	2,420	1942	30	abd 1952	1
1444	Samsville N; Edwards; 1N; 14W	Paint Creek-Bethel, Mis	2,900	1945	180	4	236
1445	Samsville NW; Edwards; 1N; 10E	Ohara, Mis	3,190	1955	20	abd 1956	3
1446	Samsville W; Edwards; 1N; 10E			1951	120	6	146
1447		Ohara, Mis	3,260		60	x	x
1448		Rosiclare, Mis*	3,275		40	x	x
1449		McClosky, Mis	3,275		40	x	x
1450	Sandoval; Marion; 2N; 1E			1909	500	17	5,833

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thickness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandoned	Producing end of year								
W		13	0	0		x	x	S	6	AL			1391
		1	0	0		x	x	S	6	AL			1392
		18	4	0		x	x	S	15	AL			1393
		53	0	0		37	0.21	S	20	A			1394
x	147	1	0	0	40	40	0.23	L	17	A	Ord	2,549	1395
		208	2	1	0	x	x	S	x	X	Ord	2,600	1396
		0	0	0	145	x	x	L	15	A	Dev	3,457	1397
W		196	0	0		34	0.31	S	16	A			1398
		1	1	0		x	x	S	8				1399
		10	1	1		x	x	L	16	A			1401
		1	0	0									1402
		18	0	0	10					A	Dev	3,570	1403
		17	0	0		34	0.23	S	9	A			1404
		1	0	0		x	x	L	6	A			1405
9	191	49	3	3	31	38	0.14	L	8	AC	Mis	3,034	1406
		4	0	0	0	x	x	L	10	MC	Mis	3,018	1407
		13	1	1	11					M	Mis	2,968	1408
		1	0	0		38	x	S	25	ML			1409
		13	1	1		38	x	L	6	MC			1410
		5	0	0	2					M	Mis	3,128	1411
		3	0	0		x	x	S	6	ML			1412
		2	0	0		x	x	L	4	MC			1413
243	1,269	965	31	21	777					A	Dev	4,486	1414
W		49	0	0		37	0.17	S	12	A			1415
		0	0	0		x	x	L	8	A			1416
W		501	13	12		39	0.28	S	12	A			1417
		19	2	0		36	x	S	20	A			1418
W		80	10	1		39	x	S	13	A			1419
W		6	0	2		37	x	OL	6	A			1420
W		71	2	3		x	x	LS	8	A			1421
W		183	10	4		38	x	OL	8	A			1422
		66	3	0									1423
		11	0	0	0					D	Mis	3,168	1424
		9	0	0		x	x	S	8	D			1425
		2	0	0		x	x	L	7	D			1426
		5	0	0	1					M	Mis	3,126	1427
		2	0	0		x	x	L	2	MC			1428
		3	0	0		x	x	L	2	MC			1429
		2	0	0									1430
6,703	30,704	2,784	9	6	2,185					A	St. P	5,655	1431
W, P		602	1	3		38	x	S	40	A			1432
W		0	0	0		37	x	S	x	A			1433
W		162	7	0		39	0.21	S	40	A			1434
		2	0	0		37	x	L	3	A			1435
W		142	0	2		37	x	LS	15	A			1436
W		590	0	1		37	x	L	17	A			1437
		0	0	0		37	x	L	x	A			1438
		8	0	0		37	x	L	17	A			1439
W		541	0	0		42	0.28	L	40	A			1440
		109	1	0		39	x	L	50	A			1441
		736	0	0									1442
		3	0	0	0	x	x	S	7	A	Mis	3,303	1443
0	7	16	0	4	1	x	x	S	6	A	Mis	3,220	1444
		1	0	0	0	x	x	L	4	X	Mis	3,248	1445
		5	0	0	4					X	Mis	3,425	1446
		3	0	0		x	x	L	6	X			1447
		0	0	0		x	x	L	6	X			1448
		2	0	0		x	x	L	6	X			1449
		153	0	12	2					D	St. P	5,023	1450

TABLE 10.—

Line no.	Pool; County; Twp.-Range	Pay zone		Year of discovery	Area proved (acres)	Oil production	
		Name, age and depth	Total primary and secondary				
			During 1959			To end of 1959	
1451		Cypress, Mis	1,400		20	0	0
1452		Benoist, Mis	1,540		460	0	2,705
1453		Geneva, Dev	2,920		390	17	3,128
1454		2 or more pays					
1455	Sandoval W; Clinton; 2N; 1W	Cypress, Mis	1,420	1946	10	0.1	26
1456	Santa Fe; Clinton; 1N; 3W	Cypress, Mis	955	1944	10	abd 1947	2
1457	Schnell; Richland; 2N; 9E	McClosky, Mis	3,000	1938	80	4	253
1458	Schnell E; Richland; 2N; 9E	McClosky, Mis	3,115	1954	20	abd 1954	0.5
1459	Seminary; Richland; 2N; 10E	McClosky, Mis	3,195	1945	160	3	222
1460	Sesser C; Franklin; 5-6S; 1-2E			1942	970	318	1,770
1461		Cypress, Mis	2,455		20	x	x
1462		Renault, Mis	2,690		120	x	x
1463		Aux Vases, Mis	2,700		660	x	x
1464		Ohara, Mis	2,675		20	0	0
1465		Rosiclare, Mis	2,810		80	x	x
1466		McClosky, Mis	2,840		100	x	x
1467		St. Louis, Mis*	3,002		20	x	x
1468		Clear Creek, Dev	4,360		160	x	x
1469		2 or more pays					
1470	Shattuc; Clinton; 2N; 1W			1945	340	16	556
1471		Cypress, Mis	1,280		160	x	x
1472		Bethel, Mis	1,420		10	x	x
1473		Trenton, Ord	4,020		240	x	x
1474	Shawneetown; Gallatin; 9S; 9E			1945	60	0	16
						abd 1950; rev 1955	
1475		Palestine, Mis*	1,720		20	x	x
1476		Waltersburg, Mis*	1,900		10	x	x
1477		Tar Springs, Mis	1,960		30	x	x
1478		Cypress, Mis*	2,375		10	x	x
1479		Aux Vases, Mis	2,650		10	0	0.5
1480		2 or more pays					
1481	Shawneetown E; Gallatin; 9S; 10E			1952	30	1	14
1482		Waltersburg, Mis	1,855		10	0	x
1483		Bethel, Mis	2,480		10	0.5	2
1484		Aux Vases, Mis	2,660		10	0.5	13
1485	Shawneetown N; Gallatin; 9S; 10E			1948	50	4	56
						abd 1953; rev 1955	
1486		Aux Vases, Mis	2,750		30	4	49
1487		McClosky, Mis	3,045		20	0	6
1488	Shelbyville C; Shelby; 11N; 4E	Aux Vases, Mis	1,860	1946	70	0.1	30
1489	Sicily; Christian; 13N; 4W	Silurian, Sil	1,860	1956	100	4	59
1490	Siggins; Clark, Cumberland; 10-11N; 10-11E, 14W			1906	4,020	x	x
						See Clark Co. Div.	
1491		1st (Upper) Siggins, Pen	400		3,210	x	x
1492		2nd (Lower) Siggins, Pen	460		500	x	x
1493		3rd and 4th Siggins, Pen	580		1,010	x	x
1494	Siloam; Brown; 2S; 4W	Silurian, Sil	603	1959	60	20	20
1495	Sorento C; Bond; 6N; 4W			1938	660	125	1,494
1496		Pennsylvanian, Pen	570		40	x	x
1497		Lingle, Dev	1,875		620	x	x
1498	Sorento W; Bond; 6N; 4W	Devonian, Dev	1,880	1956	20	abd 1956	0
1499	Sparta;† Randolph; 4-5S; 5-6W	Cypress, Mis	850	1888	20	abd 1900	x
1500	Sparta S; Randolph; 5S; 5W	Cypress, Mis	880	1949	10	abd 1950	0
1501	Stanford S; Clay, Wayne; 2N; 7E			1946	270	3	686
1502		Aux Vases, Mis	2,970		170	x	x
1503		McClosky, Mis	3,090		110	x	x
1504	Staunton;† Macoupin; 7N; 7W	Pennsylvanian, Pen	515	1952	10	0.5	2
1505	Staunton W; Macoupin; 7N; 7W	Pennsylvanian, Pen	505	1954	170	16	26
1506	Stewardson; Shelby; 10N; 5E			1939	220	62	279
1507		Aux Vases, Mis	1,945	1939	170	x	x
1508		Rosiclare, Mis	2,021	1958	60	x	x
1509		2 or more pays					
1510	Storms C;† White; 5-6S; 9-10E			1939	4,470	580	10,639
1511		Pennsylvanian, Pen	1,320		70	x	x
1512		Biehl, Pen	1,840		50	x	x
1513		Degonia, Mis	2,090		90	x	x
1514		Clore, Mis	2,100		200	x	x
1515		Palestine, Mis	2,150		50	x	x
1516		Waltersburg, Mis	2,230		2,210	x	x
1517		Tar Springs, Mis	2,340		160	x	x
1518		Hardinsburg, Mis	2,476	1959	20	x	x
1519		Cypress, Mis	2,700		180	x	x
1520		Bethel, Mis	2,810		20	x	x

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thickness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandoned	Producing end of year								
0 17	25 19	1	0	1		x	x	S	10	D			1451
		123	0	2		35	x	S	20	D			1452
		28	0	9		38	0.38	D	9	R			1453
		1	0	0									1454
		1	0	0	1	x	x	S	4	A	Mis	1,560	1455
		1	0	0	0	x	x	S	10	A	Dev	2,512	1456
		4	0	0	2	37	0.19	OL	5	AC	Mis	3,130	1457
		1	0	0	0	x	x	L	4	AC	Mis	3,150	1458
		8	0	0	2	x	x	L	8	MC	Mis	3,330	1459
		72	1	1	61					A	Dev	4,688	1460
W		2	0	0		x	x	S	5	AL			1461
		10	0	0		39	0.17	S	10	AC			1462
		45	1	1		39	0.17	S	10	AL			1463
		1	0	0		x	x	L	8	A			1464
		2	0	0		x	x	L	10	AC			1465
		2	0	0		x	x	L	5	AC			1466
		0	0	0		x	x	L	20	AC			1467
		3	0	0		x	x	L	x	AC			1468
		7	0	0									1469
		x	x	28	0	5	15				A	Ord	4,078
W		12	0	1		x	x	S	7	AL			1471
		1	0	0		x	x	S	13	AL			1472
		15	0	4		40	x	L	13	A			1473
		5	0	0	3					M	Mis	2,837	1474
		0	0	0		x	x	S	28	M			1475
		0	0	0		x	x	S	12	M			1476
		2	0	0		x	x	S	x	M			1477
		0	0	0		x	x	S	14	M			1478
		1	0	0		x	x	S	10	MF			1479
		2	0	0									1480
x	x	3	0	1	1					X	Mis	2,830	1481
		1	0	1		x	x	S	10	X			1482
		1	0	0		x	x	S	x	X			1483
		1	0	0		x	x	S	9	X			1484
		4	0	0	3					MF	Mis	3,091	1485
		3	0	0		x	x	S	20	MF			1486
		1	0	0		x	x	L	6	MF			1487
		6	0	1	0	x	x	S	15	A	Mis	3,301	1488
		5	0	0	4	x	x	L	16	X	Sil	1,884	1489
		632 for production	11,852	1,045	2	0	449				D	Dev	2,069
W	x	890	1	0		34	x	S	25	D			1491
		93	0	0		34	x	S	x	D			1492
		203	1	0		26	x	S	40	D			1493
		3	3	0	3	35	x	D	4	C	Ord	680	1494
		53	2	2	32					A	Ord	2,680	1495
		4	0	0		x	x	S	20	A			1496
		49	2	2		35	x	S	8	A			1497
		1	0	0	0	x	x	L	x	X	Ord	2,706	1498
		2	0	0	0	x	x	S	7	D	Tren	3,130	1499
		1	0	0	0	x	x	S	8	A	Mis	900	1500
3 W	380	22	0	0	13					A	Mis	3,247	1501
		16	0	0		x	x	S	12	AL			1502
		6	0	0		37	x	L	3	AC			1503
		1	0	0	1	x	x	S	11	A	Ord	2,371	1504
		18	4	1	15	x	x	S	10	X	Dev	1,487	1505
		18	4	0	18					A	Mis	2,138	1506
		17	4	0		37	0.18	S	9	A			1507
		4	2	0		x	x	S	4	A			1508
		3	2	0									1509
		157	176	326	16	5	243				AM	Mis	3,550
W		6	1	0		x	x	S	10	A			1511
		5	0	1		x	x	S	4	Af			1512
		6	0	0		38	x	S	7	AL			1513
		16	0	1		x	x	S	10	AL			1514
		4	2	0		x	x	S	12	AL			1515
		201	3	2		32	0.28	S	15	AL			1516
		11	0	1		36	x	S	10	Mf			1517
		2	2	0		x	x	S	9	Mf			1518
		9	1	1		x	x	S	10	Mf			1519
		2	0	0		x	x	S	x	Mf			1520

TABLE 10.—

Line no.	Pool; County; Twp.—Range	Pay zone		Year of discovery	Area proved (acres)	Oil production	
		Name, age and depth	Total primary and secondary				
			During 1959			To end of 1959	
1521		Renault, Mis	2,990		10	x	x
1522		Aux Vases, Mis	3,000		550	x	x
1523		Ohara, Mis*	3,095		60	x	x
1524		Rosiclare, Mis	3,115		160	x	x
1525		McClosky, Mis	3,055		130	x	x
1526		2 or more pays					
1527	Stringtown; Richland; 4-5N; 11E, 14W	Ste. Genevieve, Mis	3,025	1941	860	22	1,476
1528	Stringtown E; Richland; 4N; 14W	McClosky, Mis	3,010	1948	20	abd 1950	2
1529	Stubblefield S; Bond; 4N; 3W	Cypress, Mis	985	1955	10	abd 1956	0
1530	Sumner; Lawrence; 4N; 13W	McClosky, Mis	2,260	1944	40	abd 1953	16
1531	Sumpter; White; 4S; 9E			1945	150	17	207
1532		Tar Springs, Mis	2,575		110	x	x
1533		Hardingsburg, Mis	2,655		10	x	x
1534		Cypress, Mis	2,860		40	x	x
1535		2 or more pays					
1536	Sumpter E; White; 4-5S; 10E			1951	400	36	688
1537		Cypress, Mis	2,795		20	x	x
1538		Aux Vases, Mis	3,020		200	x	x
1539		Ohara, Mis	3,115		120	x	x
1540		Rosiclare, Mis	3,140		200	x	x
1541		McClosky, Mis	3,150		40	x	x
1542		2 or more pays					
1543	Sumpter N; White; 4S; 9E	Aux Vases, Mis	3,185	1952	160	36	340
1544	Sumpter S; White; 4-5S; 9E			1948	280	66	388
1545		Tar Springs, Mis	2,580		160	x	x
1546		Bethel, Mis*	3,025		10	x	x
1547		Aux Vases, Mis	3,260		160	x	x
1548		2 or more pays					
1549	Sumpter W; White; 4S; 9E	Aux Vases, Mis	3,165	1952	10	2	17
1550	Tamaroa;† Perry; 4S; 1W	Cypress, Mis	1,120	1942	150	8	220
1551	Tamaroa S; Perry; 4S; 1W	Cypress, Mis	1,155	1957	160	35	100
1552	Tamaroa W; Perry; 4S; 2W	Cypress, Mis	1,100	1956	20	x	x
1553	Taylor Hill; Franklin; 5S; 4E	Ohara, Mis	3,055	1949	60	4	52
1554	Thackeray; Hamilton; 5S; 7E			1944	730	66	2,887
1555		Cypress, Mis	3,030		20	6	23
1556		Aux Vases, Mis	3,360		660	x	x
1557		Ohara, Mis*	3,435		x	x	x
1558		McClosky, Mis	3,500		x	x	x
1559		2 or more pays					
1560	Thompsonville; Franklin; 7S; 4E	McClosky, Mis	3,120	1940	240	abd 1947	285
1561	Thompsonville E; Franklin; 7S; 4E	Aux Vases, Mis	3,150	1949	100	22	338
1562	Thompsonville N; Franklin; 7S; 4E			1944	570	173	2,499
1563		Cypress, Mis	2,750		20	0	x
1564		Aux Vases, Mis	3,100		570	173	x
1565	Tilden; Randolph; 4S; 5W	Silurian, Sil	2,160	1952	580	172	2,341
1566	Toliver E; Clay; 5N; 6-7E			1943	90	3	222
1567		Cypress, Mis	2,510		10	0	0
1568		Rosiclare, Mis	2,815		20	0	14
1569		McClosky, Mis	2,840		60	3	207
1570	Toliver S; Clay; 4N; 6E			1953	70	6	54
1571		Aux Vases, Mis	2,765		10	1	20
1572		McClosky, Mis	2,875		60	5	34
1573	Tonti; Marion; 2-3N; 2E			1938	740	244	11,411
1574		Bethel, Mis	1,930		x	x	x
1575		Aux Vases, Mis	2,005		x	x	x
1576		Rosiclare, Mis	2,125		x	x	x
1577		McClosky, Mis	2,130		x	x	x
1578		Devonian, Dev	3,500		80	x	x
1579		2 or more pays					
1580	Tovey; Christian; 13N; 3W	Silurian, Sil	1,850	1955	20	2	12
1581	Trumbull C; White; 5S; 8-9E			1944	970	423	1,421
1582		Cypress, Mis	2,845		220	x	x
1583		Bethel, Mis*	2,955		10	x	x
1584		Aux Vases, Mis	3,170		290	x	x
1585		Ohara, Mis	3,230		120	x	x
1586		Rosiclare, Mis	3,270		160	x	x
1587		McClosky, Mis	3,290		340	x	x
1588		2 or more pays					
1589	Turkey Bend; Perry; 4S; 2W	Trenton, Ord	3,940	1957	20	x	x
1590	Valier; Franklin; 6S; 2E	McClosky, Mis	2,715	1942	20	0	2

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thick-ness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandon-ed	Producing end of year								
x	24	1	0	0		x	x	L	5	A			1521
		47	16	0		38	x	S	13	Af			1522
		0	2	1		x	x	L	10	AC			1523
		8	0	2		x	x	L	2	AC			1524
		6	1	0		x	x	L	5	MC			1525
		22	6	1									1526
		34	0	1	23	40	0.24	OL	8	AC	Mis	3,401	1527
		1	0	0	0	x	x	L	4	X	Mis	3,144	1528
		1	0	0	0	x	x	S	4	X	Dev	2,455	1529
		2	0	0	0	x	x	L	4	MC	Mis	2,365	1530
		14	2	0	11					A			1531
		9	2	0		x	x	S	18	Af	Mis	3,379	1532
		1	0	0		x	x	S	14	Af			1533
		3	0	0		x	x	S	15	Af			1534
		1	0	0									1535
		29	0	0	26					A	Mis	3,305	1536
		2	0	0		x	x	S	16	AL			1537
		10	0	0		x	x	S	15	AL			1538
		3	0	0		x	x	L	12	AC			1539
		4	0	0		x	x	L	4	AC			1540
		1	0	0		x	x	L	5	AC			1541
		9	0	0									1542
		15	1	0	14	x	x	S	3	NL	Mis	3,425	1543
		28	1	0	26					Af	Mis	3,430	1544
		12	0	0		x	x	S	8	Af			1545
		0	0	0		x	x	S	15	Af			1546
		15	1	0		x	x	S	10	Af			1547
		3	0	0									1548
		1	0	0	1	x	x	S	5	NL	Mis	3,336	1549
		14	0	0	10	36	0.12	S	13	AL	Mis	1,630	1550
		14	0	0	14	x	x	S	7	X	Mis	1,200	1551
		2	0	0	2	x	x	S	5	X	Mis	1,600	1552
		3	0	0	2	x	x	L	4	X	Mis	3,227	1553
		66	0	0	55					A	Mis	3,660	1554
		2	0	0		x	x	S	24	A			1555
		59	0	0		x	x	S	15	AL			1556
		0	0	0		x	x	L	5	AC			1557
		3	0	0		x	x	L	10	AC			1558
		2	0	0									1559
		19	0	0	0	38	0.16	L	10	A	Mis	3,455	1560
19 143 W	109 798	10	1	0	9	38	x	S	8	ML	Mis	3,371	1561
		73	1	0	47					A	Mis	3,365	1562
		1	0	0		x	x	S	10	AL			1563
		72	1	0		39	x	S	20	AL			1564
		28	3	0	28	42	x	L	60	R	Ord	3,093	1565
		5	0	0	3					M	Mis	2,965	1566
		1	0	0		x	x	S	14	M			1567
		1	0	0		x	x	L	6	MC			1568
		3	0	0		x	x	OL	8	MC			1569
x W W	88	4	0	0	4					M	Mis	2,915	1570
		1	0	0		x	x	S	x	MC			1571
		3	0	0		x	x	L	5	MC			1572
		98	1	1	80					D	Ord	4,900	1573
		9	0	0		39	x	S	20	D			1574
		17	0	1		39	x	S	30	D			1575
		7	2	0		x	x	LS	12	D			1576
		56	0	1		39	0.21	OL	15	D			1577
		7	0	0		x	x	D	7	R			1578
x	x	1	0	0	1	x	x	L	10	X	Sil	1,881	1579
		74	24	2	59					A	Mis	4,125	1580
		21	6	0		36	x	S	10	A			1581
		1	1	0		x	x	S	x	A			1582
		26	15	1		36	x	S	9	A			1583
		5	3	0		x	x	L	15	AC			1584
		5	1	0		x	x	L	6	AC			1585
		14	1	1		x	x	L	5	AC			1586
		6	2	0									1587
W		1	0	0	1	x	x	L	x	X	Ord	4,044	1588
		1	0	0	0	x	x	L	12	ML	Mis	2,725	1589
													1590

TABLE 10.—

Line no.	Pool; County; Twp.—Range	Pay zone		Year of discovery	Area proved (acres)	Oil production	
		Name, age and depth	Total primary and secondary				
							During 1959
1591	Waggoner;† Montgomery; 11N; 5W	Pottsville, Pen	610	1940	60	x	11
1592	Wakefield; Jasper; 5N; 9E	Rosiclare, Mis	3,100	1946	40	0	2
						abd 1947; rev 1953; abd 1954	
1593	Wakefield N; Jasper; 5N; 9E	McClosky, Mis	3,000	1953	20	abd 1958	20
1594	Wakefield S; Richland; 5N; 9E	McClosky, Mis	3,040	1955	20	abd 1955	0
1595	Walpole; Hamilton; 6-7S; 6E			1941	1,760	112	6,200
1596		Tar Springs, Mis	2,465		90	x	x
1597		Aux Vases, Mis	3,070		1,660	x	x
1598		Rosiclare, Mis	3,195		20	0	9
1599	Walpole S; Hamilton; 7S; 6E	Aux Vases, Mis	3,120	1951	20	2	115
1600	Waltonville; Jefferson; 3S; 2E	Bethel, Mis	2,460	1943	40	2	110
1601	Wamac; Clinton, Marion, Washington; 1N; 1E, 1W			1921	290	11	639
1602		Petro, Pen	720	1921	250	x	x
1603		Devonian, Dev	3,015	1959	20	x	x
1604	Wamac E;† Marion; 1N; 1E	Isabel (Wilson Sd.), Pen	845	1952	110	6	33
1605	Warrenton-Borton; Coles, Edgar; 13-14N; 13-14W		200	1906	170	x	32
1606	Waterloo; Monroe; 1-2S; 10W	Trenton, Ord	410	1920	230	x	238
						abd 1930; rev 1939; converted in part to gas storage 1951	
1607	Watson; Effingham; 7N; 5-6E			1957	60	12	24
1608		Rosiclare, Mis	2,415	1957	40	6	14
1609		McClosky, Mis	2,434	1958	20	6	11
1610	Waverly;† Morgan; 13N; 8W	Devonian-Silurian	1,020	1946	20	0	0
1611	Weaver; Clark; 11N; 10W			1949	700	96	1,590
1612		Cole, Mis	1,565		20	x	x
1613		Devonian, Dev	2,030		700	x	x
1614	West Frankfort C; Franklin; 7S; 2-3E			1941	1,170	365	3,810
1615		Tar Springs, Mis	2,060		520	x	x
1616		Aux Vases, Mis	2,710		200	x	x
1617		Ohara, Mis	2,760		480	x	x
1618		Rosiclare, Mis*	2,810		60	x	x
1619		McClosky, Mis	2,825		280	x	x
1620		2 or more pays					
1621	West Seminary; Clay; 2N; 7E			1959	270	223	223
1622		Aux Vases, Mis	2,972	1959	160	x	x
1623		Rosiclare, Mis	3,059		60	x	x
1624		McClosky, Mis	3,068	1959	220	x	x
1625		2 or more pays					
1626	Westfield; Clark, Coles; 11-12N; 11E-14W			1904	10,020	x	x
						See Clark Co. Div.	
1627		Gas, Pen	280		9,060	x	x
1628		Westfield, Mis	335		9,030	x	x
1629		Carper, Mis	875		170	x	x
1630		Trenton, Ord	2,300		1,100	x	x
1631		2 or more pays					
1632	Westfield E;† Clark; 11-12N; 14W	Pennsylvanian, Pen	400	1947	130	x	x
1633	Westfield N; Coles; 12N; 14W			1949	20	abd 1957	0.4
1634		Pleasantview, Pen	275		10	0	0
1635		Pennsylvanian, Pen	490		10	0	0
1636	Whittington; Franklin; 5S; 3E			1939	550	41	953
1637		Hardinsburg, Mis	2,310		80	x	x
1638		Cypress, Mis	2,535		70	x	x
1639		Aux Vases, Mis	2,735		40	x	x
1640		Ohara, Mis	2,835		240	x	x
1641		Rosiclare, Mis	2,880		20	x	x
1642		McClosky, Mis	2,870		100	x	x
1643		St. Louis, Mis	3,080		40	x	x
1644		2 or more pays					
1645	Whittington S; Franklin; 5-6S; 3E	Cypress, Mis	2,580	1950	100	20	356
1646	Whittington W; Franklin; 5S; 2E			1943	480	195	651
1647		Bethel, Mis	2,615		10	x	x
1648		Renault, Mis	2,680		220	x	x
1649		Aux Vases, Mis	2,700		160	x	x
1650		Ohara, Mis	2,800		100	x	x

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).

(Continued)

(M bbls.)		Number of wells				Character of oil		Pay zone			Deepest zone tested		Line no.
Secondary		1959				Gravity API	Sulfur percent	Character	Av. thick-ness in ft.	Structure	Name	Depth of hole (ft.)	
During 1959	To end of 1959	Completed to end of 1959	Completed	Abandon-ed	Producing end of year								
		6	2	0	2	28	0.21	S	10	X	Dev	1,893	1591
		2	0	0	0	x	x	L	5	X	Mis	3,207	1592
		1	0	0	0	x	x	L	6	X	Mis	3,204	1593
		1	0	0	0	x	x	L	4	X	Mis	3,059	1594
		100	1	0	94			A		A	Mis	3,390	1595
		6	0	0		36	x	S	15	AL			1596
		93	1	0		38	0.13	S	20	A			1597
		1	0	0		x	x	L	7	AC			1598
		2	0	0	2	x	x	S	6	AL	Mis	3,362	1599
		4	0	0	3	38	0.14	S	9	A	Mis	2,905	1600
11 W	27	114	1	1	10					DF	Ord	4,160	1601
		113	0	1		30	x	S	20	DF			1602
		1	1	0		x	x	L	9	DF			1603
		11	1	1	7	x	x	S	15	ML	Mis	2,216	1604
		31	1	0	3	x	x	S	20	ML	Tren	2,212	1605
		41	0	0	3	30	0.97	L	50	A	Precam	2,768	1606
		3	0	0	3					X	Mis	2,647	1607
		2	0	0		x	x	S	5	X			1608
		1	0	0		x	x	L	11	X			1609
		1	0	0	0	x	x	L	10	A	Ord	1,534	1610
205 W W W	407	39	0	1	29					R	Dev	2,160	1611
		1	0	0		x	x	L	5	D			1612
		38	0	1		37	x	L	10	R			1613
		83	2	1	74					A	Mis	3,156	1614
		39	2	1		39	0.13	S	20	A			1615
		14	0	1		37	x	S	20	AL			1616
		11	0	0		39	x	L	8	AC			1617
		0	0	0		x	x	L	8	AC			1618
		6	0	0		38	x	L	14	AC			1619
		13	0	1									1620
x for production W	13	25	25	0	25					MC	Mis	3,198	1621
		16	16	0				S	10	MC			1622
		3	3	0		x	x	OL	6	MC			1623
		11	11	0		x	x		12	MC			1624
		4	4	0									1625
		1,726	35	13	207					D	St. P	3,009	1626
		209	0	10		28	x	S	25	D			1627
		1,453	0	6		34	x	L	x	D			1628
		16	5	1		x	x	S	18	D			1629
		64	30	2		38	0.18	L	40	D			1630
		4	0	6									1631
		13	0	0	3	x	x	S	11	ML	Pen	678	1632
		2	0	0	0					X	Pen	611	1633
		400	1	0	0	x	x	S	5	X			1634
		1	0	0		x	x	S	10	X			1635
		36	0	1	28					A	Dev	4,810	1636
		6	0	1		x	x	S	10	A			1637
		6	0	0		39	x	S	10	A			1638
		3	0	0		x	x	S	15	A			1639
		11	0	0		x	x	L	10	AC			1640
		1	0	0		x	x	L	10	AC			1641
		5	0	0		38	0.24	L	9	AC			1642
		1	0	0		38	0.24	L	6	AC			1643
		2	0	0									1644
		10	0	0	10	x	x	S	10	A	Mis	2,953	1645
		31	7	2	19					A	Mis	3,535	1646
		1	0	0		x	x	S	10	AL			1647
		18	7	0		x	x	S	15	AL			1648
		5	1	2		x	x	S	15	AL			1649
		1	0	0		x	x	L	5	AC			1650

TABLE 10.—

Line no.	Pool; County; Twp.—Range	Pay zone		Year of discovery	Area proved (acres)	Oil production		
		Name, age and depth				Total primary and secondary		
						During 1959	To end of 1959	
1651	Wilberton; Fayette; 5N; 2E Williams C; Jefferson; 2-3S; 2E	Rosiclare, Mis*	2,780	1959 1948	40	x	x	
1652		McClosky, Mis	2,900		40	x	x	
1653		2 or more pays						
1654		Lingle, Dev	3,466		20	4	4	
1655					400	63	878	
1656		Bethel, Mis	2,490		170	x	x	
1657		Aux Vases, Mis	2,550		280	x	x	
1658		McClosky, Mis*	x		20	x	x	
1659	Willow Hill E; Jasper; 6-7N; 10-11E	2 or more pays		1946				
1660		McClosky, Mis	2,645		320	4	243	
1661		Woburn C; Bond; 6-7N; 2W			1940	1,730	251	3,381
1662			Cypress, Mis		865	220	x	x
1663			Bethel, Mis		1,020	320	x	x
1664			Renault, Mis		1,047	20	x	x
1665			Aux Vases, Mis		1,055	50	x	x
1666			Lingle, Dev		2,275	1,040	x	x
1667	Woodlawn; Jefferson; 2-3S; 1-2E	Trenton, Ord	3,170		380	x	x	
1668		2 or more pays						
1669				1940	1,980	315	15,332	
1670		Tar Springs, Mis*	x		20	x	x	
1671			Cypress, Mis	1,800	80	x	x	
1672			Bethel, Mis	1,960	1,900	x	x	
1673			Aux Vases, Mis*	1,975	240	x	x	
1674			Rosiclare, Mis	2,205	300	x	x	
1675	Xenia; Clay; 2N; 5E Xenia E; Clay; 2N; 5E	McClosky, Mis*	2,200		20	x	x	
1676		Lingle, Dev	3,690	240	x	x		
1677		Aux Vases, Mis	2,785	1941	10	0.5	34	
1678				1951	210	48	461	
1679			Cypress, Mis	2,500	150	x	x	
1680			Bethel, Mis	2,710	50	x	x	
1681			Renault, Mis	2,755	1959	10	x	x
1682		York; Clark, Cumberland; 9-10N; 10-11E; 14W	Isabel, Pen	590	1907	350	x	x
1683	Zenith; Wayne; 2N; 5E	McClosky, Mis	2,970	1948	40	See Clark Co. Div. abd 1945; rev 1950 abd 1956	24	
1684	Zenith N; Wayne; 2N; 6E			1951	280		851	
1685		Rosiclare, Mis	3,080		240		x	
1686		McClosky, Mis	3,140		180		x	
1687		2 or more pays						
1688	Zenith S; Wayne; 1N; 5E			1949	280	5	754	
1689		Ohara, Mis*	2,920		40	x	x	
1690		McClosky, Mis	2,985		280	x	x	
1691	Total for Illinois	2 or more pays						
1692					574,625	76,727	2,153,045	

\*Multiple pay or workover wells only.

†Pool listed in table 11 (gas production).







## PART II

### WATERFLOOD OPERATIONS

CARL W. SHERMAN AND RICHARD F. MAST

#### INTRODUCTION

As in past years, this review of waterflood operations in the state of Illinois is the result of the combined efforts of the Illinois State Geological Survey and the Illinois Secondary Recovery and Pressure Maintenance Committee of the Interstate Oil Compact Commission.

Governor William G. Stratton's appointments to this committee were:

Carl W. Sherman, Chairman, Illinois State Geological Survey, Urbana, Illinois  
 A. H. Bell, Past Chairman, Illinois State Geological Survey, Urbana, Illinois  
 Hugh S. Barger, Barger Engineering, Evansville, Indiana  
 C. E. Brehm, Box 618, Mt. Vernon, Illinois  
 Robert Bulla, Robinson, Illinois  
 James T. Dorland, Calvert Drilling Company, Olney, Illinois  
 Robert E. Dunn, Walter Duncan Oil Properties, Mt. Vernon, Illinois  
 Jim Eads, Superior Oil Company, Crossville, Illinois  
 Millard Flood, The Ohio Oil Company, Terre Haute, Indiana  
 T. W. George, Box 152, Mt. Carmel, Illinois  
 Robert G. Jones, The Ohio Oil Company, Bridgeport, Illinois  
 R. N. Knoblock, Texaco Inc., Salem, Illinois  
 T. F. Lawry, Mahutska Oil Company, Robinson, Illinois  
 R. W. Love, Texaco Inc., Salem, Illinois  
 John Patterson, Shell Oil Co., Centralia, Illinois  
 Paul Phillipi, Forest Oil Corporation, Casey, Illinois  
 Mark Plummer, The Pure Oil Company, Olney, Illinois  
 J. D. Simmons, Carter Oil Company, Mattoon, Illinois  
 Marion Smith, Gulf Oil Corporation, Evansville, Indiana  
 W. G. Sole, Magnolia Petroleum Company, Salem, Illinois  
 C. R. Temple, Sohio Petroleum Company, Centralia, Illinois  
 R. R. Vincent, C. L. McMahon, Inc., Evansville, Indiana  
 R. A. Wilson, Tidewater Oil Company, Robinson, Illinois

Transfers during the year took an unusually heavy toll of the members of this committee, so the Illinois Geological Survey wishes to thank not only the official members but also their successors for their efforts and cooperation.

We should also like to express our appreciation of the great amount of time and effort given by waterflood operators in Illinois. In many cases, providing the requested data was a major project, and without the help from both large and small operators this report could not have been presented. Betty Hanagan and Anthony Richards of the Survey staff compiled the data.

This summary supplements ten similar publications by the Illinois Geological Survey covering the years 1949 through 1958.

The stratigraphic sequence of formations in the Illinois Basin is listed below, with asterisks indicating the oil producing zones and with the number of reported waterflood projects in the right-hand column. The number of projects in a given zone does not reflect areal extent or floodability.

<i>Name of formation (sand name)</i>	<i>Number of waterfloods reported in 1959</i>
* (Westfield "Gas" Sand) . . . . .	0
* (Casey "Gas" Sand) . . . . .	1
* (Siggins) . . . . .	3
* (Bellair "500") . . . . .	2
* (Biehl) . . . . .	27
* (Bridgeport) . . . . .	13
* (Casey) . . . . .	12
* (Claypool) . . . . .	2
* (Jordan) . . . . .	6
* (Pennsylvanian unclassified) . . . . .	5
* (Petro) . . . . .	2
* (Robinson) . . . . .	72
* (U. Partlow) . . . . .	7
Kinkaid . . . . .	0
* (Chester unclassified) . . . . .	0
* (Degonia) . . . . .	1
* (Clare) . . . . .	2
* (Palestine) . . . . .	2
Menard . . . . .	0
* (Waltersburg) . . . . .	14
Vienna . . . . .	0
* (Tar Springs) . . . . .	21
* (Glen Dean) . . . . .	0
* (Hardinsburg) . . . . .	5
* (Golconda (Jackson)) . . . . .	2
* (Cypress (Kirkwood, Weiler)) . . . . .	126
* (Paint Creek (Bethel)) . . . . .	33
* (Yankeetown (Benoist)) . . . . .	44
* (Renault) . . . . .	4
* (Aux Vases) . . . . .	78

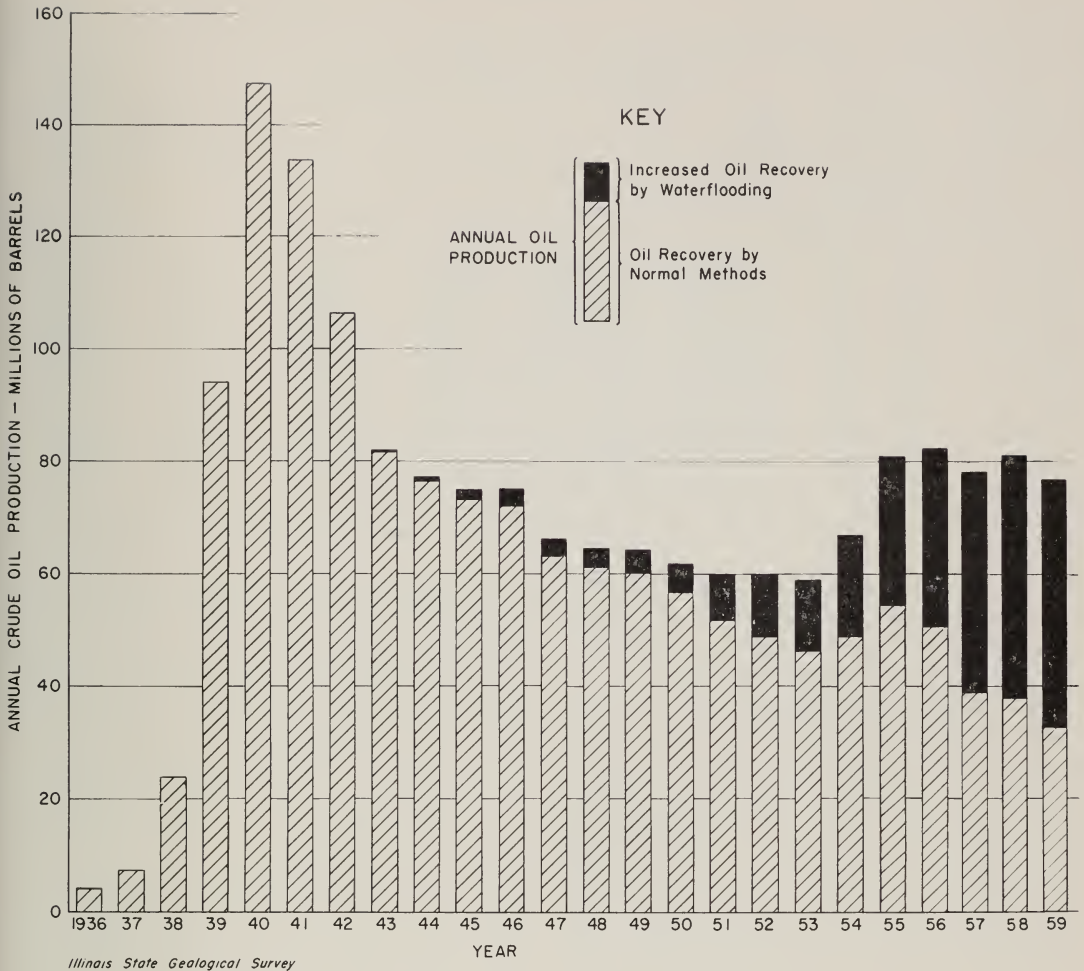


Fig. 4.—Annual crude oil production in Illinois.

## SUMMARY

In 1959 Illinois' total waterflood production reached a new high of 43,790,000 barrels, including 41,360,000 barrels from controlled and dump floods (table 15) and 2,430,000 barrels estimated to have been produced from unreported dump floods. The increase is a gain of 2 percent over the 1958 waterflood production. Waterflood production accounted for 57 percent of the total 1959 production.

The number of barrels of waterflood oil produced in 1959 was 867,000 more than in 1958 but the rate of gain decreased. The

Name of formation (sand name)	Number of waterfloods reported in 1959
Ste. Genevieve	
* (Ohara) . . . . .	10
* (Rosiclare) . . . . .	28
* (McClosky) . . . . .	54
* St. Louis . . . . .	0
* Salem . . . . .	0
Osage	
* (Carper) . . . . .	0
Chouteau . . . . .	0
New Albany . . . . .	0
* Devonian . . . . .	2
* Silurian . . . . .	0
Maquoketa . . . . .	0
* (Trenton) . . . . .	0

\* Oil producing formation. See also figure 3.

TABLE 12.—SUMMARY OF WATER-

Year	No. of projects	Water injection (M bbls)		Reported waterflood oil production (M bbls)		Estimated dump flood production (M bbls)	
		Annual	Cumulative	Annual	Cumulative	Annual	Cumulative
1949 . . . . .	33	20,612	50,983	2,511	10,393	1,500	5,000
1950 . . . . .	63	44,053	99,040	3,107	13,826	1,500	6,500
1951 . . . . .	84	57,147	148,279	6,672	21,890	1,500	8,000
1952 . . . . .	131	72,951	221,078	8,752	29,000	2,000	12,000
1953 . . . . .	167	118,409	335,727	10,086	39,800	2,250	14,600
1954 . . . . .	232	176,012	512,202	15,985	55,687	2,129	17,900
1955 . . . . .	284	224,579	745,573	24,585	81,131	1,978	19,800
1956 . . . . .	333	271,270	1,014,900	29,600	111,700	1,700	21,500
1957 . . . . .	382	295,750	1,310,000	34,300	146,000	1,750	23,250
1958 . . . . .	443	317,153	1,606,500	40,883	198,857	2,040	25,290
1959 . . . . .	499	345,098	1,954,200	41,360	250,031	2,430	27,720

\* Waterflood oil includes estimated dump flood production. All other figures exclude dump flood data.

percentage of Illinois production attributable to waterflooding continued to increase at approximately the same rate, but only because total production decreased.

None of the gross figures include any of the 1,110,000 barrels of oil produced from projects that injected water but were classified by the operators as pressure maintenance projects. The data obtainable on these projects is presented in table 16 and undoubtedly includes a large amount of what could be justifiably classified as waterflood oil. This oil probably more than compensates for the amount of primary oil that may be included in table 15.

A visual presentation of the importance of secondary recovery operations in Illinois is shown in figure 4. The cumulative total waterflood oil at the end of 1959 was 250,031,000 barrels. This total includes an estimated 27,720,000 barrels of dump flood oil.

Table 15 contains information on 499 waterflood projects. This is an increase of 56 over the previous year and the growth of about 13 percent is only slightly under the 1958 rate. These values are plotted in the bar graphs in figure 5.

Annual and cumulative secondary recovery figures on oil production by pool are given in table 10. Pay zones that are waterflooded are indicated by the letter "W". Pressure maintenance in pay zones is indicated by the letter "P".

Of more significance than the number of projects is the acreage involved. The total area under flood at the end of 1959 is about 137,000 acres, an increase of 14,500 acres, or 12 percent, during the past year. This total flood acreage is approximately 24 percent of Illinois' 574,625 productive acres. The average waterflood recovery per acre from the projects reported in table 12 is now 1,825 barrels.

Excluding unreported dump flood and pressure maintenance projects, the water injected during 1959 was 345,098,000 barrels which brings the cumulative total water injection to 1,954,200,000 barrels (table 15). The ratio of water injected to oil produced during 1959 was 8.3.

Table 12 is a compilation of waterflood statistics from 1949 to 1959. The current year's annual production figure plus the previous year's cumulative production figure do not necessarily equal the current year's cumulative production. This is because of the adjustments that constantly are being made both by the operators and by the Survey.

Table 13 is a key to the system of numbers used on plate 1 and includes a summary of reported projects by counties, as well as their geographical locations.

Table 14 is a numerical listing of the projects in table 15, in which the projects are arranged alphabetically by pool and

## FLOOD STATISTICS, 1949-1959

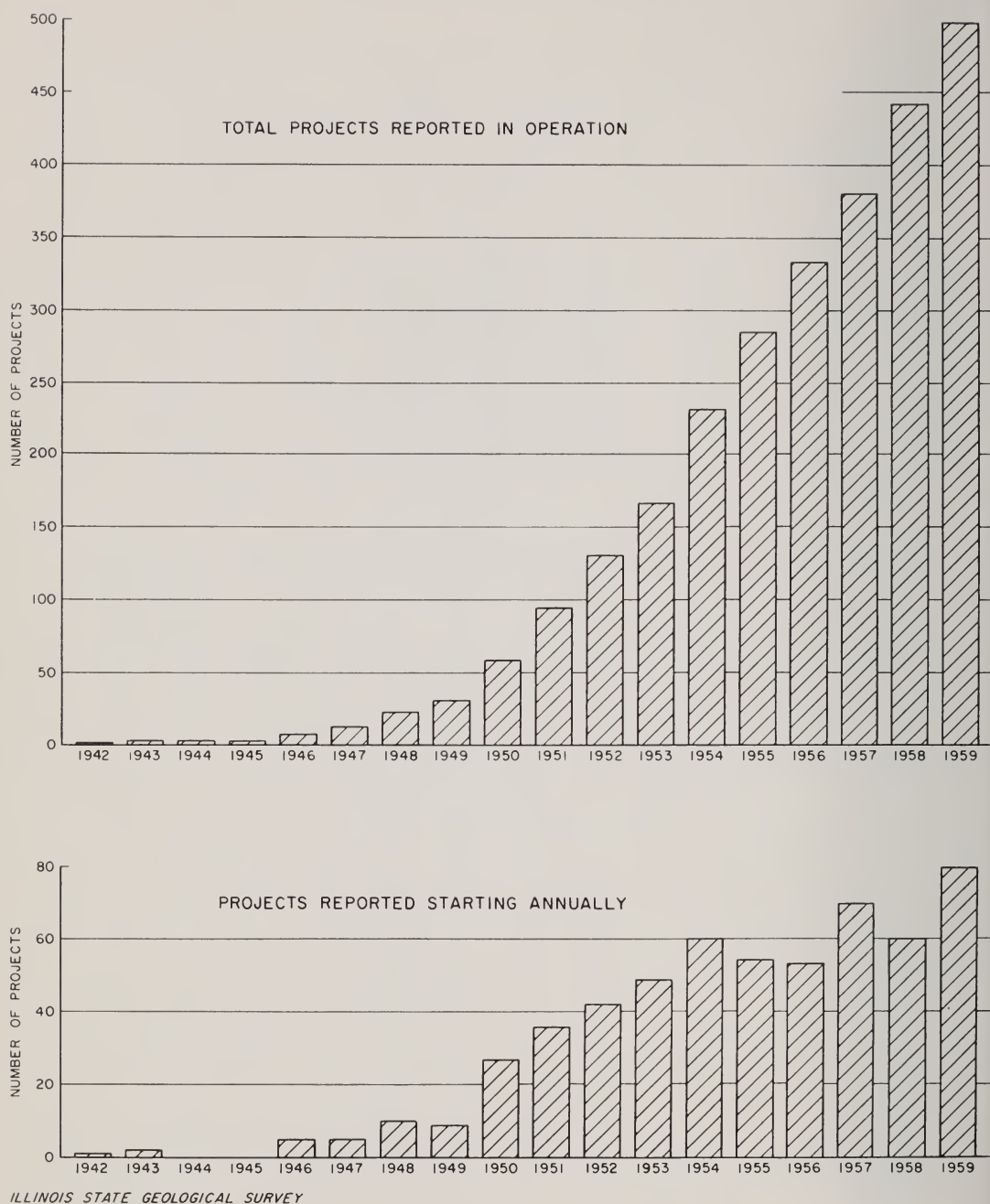
Total oil prod. (M bbls)	Waterflood prod. % of total prod.*	No. of wells in flood projects		Productive acreage		% of total acreage under flood	Cumulative av. water-flood oil recovery/acre subjected to injection	Cumulative injected water/cumulative produced oil
		Inj.	Prod.	Sub-jected to inj.	Total			
64,501	6.2	946	1,055	8,450	375,985	2.2	1,230	4.9
62,028	7.4	1,097	1,197	14,123	397,685	3.6	979	7.2
60,244	13.4	1,620	5,230	17,646	412,050	4.3	1,241	6.8
60,071	17.9	2,160	5,114	31,330	425,025	7.4	926	7.6
59,025	20.9	2,849	5,298	37,854	434,100	8.7	1,051	8.4
67,000	27.0	3,597	6,686	59,027	500,130	11.8	943	9.2
81,131	32.7	4,407	7,163	72,832	521,200	14.0	1,114	9.2
82,314	38.0	5,307	7,687	92,350	539,315	17.1	1,210	9.1
76,649	47.0	5,734	7,814	112,000	550,305	20.4	1,304	9.0
80,779	53.1	6,647	8,567	122,500	562,535	21.8	1,623	8.1
76,727	57.1	7,327	9,306	136,976	574,625	23.8	1,825	7.8

TABLE 13.—PROJECT NUMBERS BY COUNTY AND SUMMARY OF WATERFLOOD PROJECTS IN 1959

No.	County	Active water floods	Active pressure maintenance	Abandoned	Total	No.	County	Active water floods	Active pressure maintenance	Abandoned	Total
000	Bond . . .	1	1	2	4	3200	Pope . . .	0	0	0	0
100	Christian . .	3	0	0	3	3300	Randolph . .	0	0	0	0
200	Clark . . .	18	0	6	24	3400	Richland . .	14	0	4	18
300	Clay . . .	32	0	1	33	3500	St. Clair . .	0	0	0	0
400	Clinton . .	7	3	1	11	3600	Saline . . .	5	0	0	5
500	Coles . . .	4	0	1	5	3700	Sangamon . .	0	0	0	0
600	Crawford . .	74	0	12	86	3800	Shelby . . .	1	0	0	1
700	Cumberland .	4	0	1	5	3900	Wabash . . .	55	2	8	65
800	Douglas . .	1	0	0	1						
900	Edgar . . .	0	0	0	0	4000	Washington .	5	0	0	5
						4100	Wayne . . .	34	0	6	40
1000	Edwards . .	16	2	4	22	4200	White . . .	73	3	18	94
1100	Effingham .	6	0	0	6	4300	Williamson .	0	0	0	0
1200	Fayette . .	25	1	0	26						
1300	Franklin . .	10	0	0	10		Totals . . .	499	14	74	587
1400	Gallatin . .	17	1	1	19						
1500	Hamilton . .	13	0	1	14						
1600	Hancock . .	0	0	0	0						
1700	Hardin . . .	0	0	0	0						
1800	Jackson . .	0	0	0	0						
1900	Jasper . . .	9	0	1	10						
2000	Jefferson . .	4	1	2	7						
2100	Johnson . .	0	0	0	0						
2200	Lawrence . .	52	0	4	56						
2300	Macon . . .	0	0	0	0						
2400	Macoupin . .	0	0	0	0						
2500	Madison . .	2	0	1	3						
2600	Marion . . .	13	0	0	13						
2700	McDonough .	0	0	0	0						
2800	Monroe . . .	0	0	0	0						
2900	Montgomery	1	0	0	1						
3000	Moultrie . .	0	0	0	0						
3100	Perry . . .	0	0	0	0						

then alphabetically by operator. Used as a cross index, table 14 will allow the reader to locate easily in table 15 any flood of particular interest because of its geographical location.

Table 16 is a tabulation of the information obtained on the 12 projects that were classified as pressure maintenance operations. As has been mentioned, a large proportion of this oil should undoubtedly be considered waterflood production, but no attempt has been made in this report to re-



**Fig. 5.—Reported development of waterflood projects in Illinois.**

classify the projects or to differentiate between primary and secondary oil.

Table 17 presents the data available on the 74 waterflood projects that had been abandoned by the end of 1959. As can be

seen by examination of this table, all but a few of these abandonments are due to lack of response to water injection rather than to completion of a normal flood life.

TABLE 14.—WATERFLOOD PROJECTS IN NUMERICAL ORDER AS SHOWN ON PLATE 1

No.	Oil pool C=Consolidated	Operator	Project U=Unit	No.	Oil pool C=Consolidated	Operator	Project U=Unit
<b>Bond County</b>				<b>Clinton County</b>			
000	Old Ripley	Cahill & Smith	Ripley	400	Bartelso	T. R. Kerwin	Belle Oil
001†	Beaver Creek	Conrey & Conrey	Wrone	401	Bartelso	Robbin	Robbin U
002*	Woburn C	Arrow	Spindler	402	Bartelso	H. S. Woodard	H. S. Woodard,
003*	Sorento C	J. Simpkins	—				Trustee
004	Woburn C	E. E. Jenneman	Spindler	403	Centralia	W. O. Morgan	Centralia Field
<b>Christian County</b>				404	Centralia	Shell	Centralia U
100	Assumption C	Continental	Benoist	405†	Beaver Creek S	Conrey & Conrey	Kneier-Ragland
101	Assumption C	Continental	Devonian	406†	Germantown E	Nat. Assoc. Pet.	Germantown
102	Assumption C	Continental	Rosiclare	407†	Carlyle N	Conrey & Conrey	Kreitemeyer
<b>Clark County</b>				408*	Centralia	Sohio	Copple Town
200	Casey	F. A. Bridge	States Oil	409	Beaver Creek	Conrey & Conrey	Reinkensmeyer
201	Casey	Forest	Casey	410	Shattuc	T. M. Conrey	Gullick
202	Casey	D. W. Franchot	N. Casey	<b>Coles County</b>			
203	Johnson N	W. H. Bass	N. Johnson	500	Mattoon	Humble	Mattoon
204	Johnson N	F. A. Bridge	Block "A"	501	Mattoon	Noknil	Mattoon
205	Johnson N	F. A. Bridge	Block "B"	502*	Westfield	General Oper-	
206	Johnson N	O. A. Oldfield	V. Jones			ations	Johnson
207	Johnson N	Pure	N. Johnson	503	Mattoon	W. Duncan	Redman-Macke
208	Johnson N	Tidewater	Clark County 1	504	Mattoon	D. Carrol	
209	Johnson S	Forest	S. Johnson	<b>Crawford County</b>			
210	Johnson S	Pure	Johnson Ext. 1	600	Bellair	Forest	Bellair
211	Johnson S	Pure	Johnson Ext. 2	601	Bellair	Pure	Fulton
212	Johnson S	Pure	Pure-Kewanee	602	Main C	Ashland	Birds 1
213	Johnson S	Pure	Weaver-Bennett	603	Main C	Ashland	Birds 2
214	Martinsville	Fröderman & Connelly	Fröderman & Connelly U	604	Main C	Bell Bros.	Barrick
215	Siggins	General Oper-	Siggins U	605	Main C	M. F. Roberts	Bishop
		ations		606	Main C	Forest	Oblong-Flood 2
216	Siggins	Pure	Union Group	607	Main C	F. T. Whittinghill	Mitchell
217*	Casey	Calvan American	Shawver	608	Main C	W. Duncan	Tohill-Hughes-
218*	Martinsville	J. B. Buchman	—				Robinson
219*	Martinsville	Mobil	Carper	609	Main C	E. Constantin	J. S. Kirk
220*	Martinsville	Mobil	Casey	610	Main C	E. Constantin	Smith
221*	Westfield	Ree	Hawkins	611	Main C	Forest	Oblong-Flood 1
222*	Westfield	Forest	Parker	612	Main C	D. W. Franchot	Birds
223	Oak Point	D. B. Lesh	B. Finney	613*	Main C	General Oper-	
						ations	Culver
<b>Clay County</b>				614*	Main C	General Oper-	
300	Clay City C	Calvert	N. Clay City U			ations	Littlejohn
301*	Clay City C	Fairfield Salvage & Prod.	Minnie	615	Main C	G. M. J. Hardinville	Porterville
302	Clay City C	Pure	Banker School Cons.	616	Main C	Kewanee	Tohill & Hughes
303	Iola C	Tidewater	Iola Coop.	617	Main C	G. Jackson	Wright
304	Iola C	Tidewater	Reed & Heirs	618	Main C	Logan	Stanford
305	Kenner	Texaco	Kenner U	619	Main C		Alexander-
306	Kenner W	Phillips	W. Kenner U				Reynolds
307	Oskaloosa	Texaco	Oskaloosa U	620	Main C	Mahutska	Oil Center
308	Passport	Mobil	Stanley-Hinterscher-Malin U	621	Main C	Mahutska	Eaton
309	Sailor Springs C	Cities Service	Wyatt	622	Main C	Mahutska	C-T-L
310	Sailor Springs C	Gulf	R. Keck	623	Main C	Ohio	25 projects
311	Sailor Springs C	Mobil	Sailor Springs U	624	Main C	Partlow & Cochonour	Rich U
312	Sailor Springs C	W. C. McBride	Goldsbey-Dickey	625	Main C	F. T. Whittinghill	"D. I. M."
313	Sailor Springs C	W. C. McBride	Duff-Keck	626	Main C	E. C. Reeves	Billingsley
314	Sailor Springs C	W. C. McBride	Bothwell	627*	Main C	Shakespeare	McIntosh U
315	Sailor Springs C	Shulman Bros.	Colclasure	628*	Main C	Shakespeare	Montgomery U
316	Sailor Springs C	Shulman Bros.	Neff	629	Main C	Tidewater	Clark-Hulse
317	Stanford S	Gulf	S. Stanford U	630	Main C	Tidewater	Birch 1
318	Sailor Springs C	Ashland	E. Flora	631	Main C	Tidewater	Birds Area
319	Sailor Springs C	Breuer & Curran	Clay City N E	632	Main C	Tidewater	Barrick-Walters
320	Ingraham	Humble	Ingraham U	633	Main C	Tidewater	Good-Haws
321	Iola C	Iola C	Iola	634	Main C	Tidewater	Howard
322	Iola C	Texaco	Iola Coop.	635	Main C	Tidewater	Ames
323	Iola C	Texaco	Iola Coop.	636	Main C	Tidewater	Dennis-Hardin
324	Kenner N	Indiana Farm Bureau	Theobald	637	Main C	Tidewater	Thompson
325	Iola C	Tidewater	L. Moss "A"	638	Main C	Tidewater	Henry-Ikemire
326	Iola C	Tidewater	M. J. Reed	639	Main C	Tidewater	Lefever-
327	Passport	Shakespeare	Passport U				Musgrave
328	Sailor Springs C	Ashland	Sailor Springs	640	Main C	Tidewater	Montgomery-
329	Sailor Springs C	Skiles	N. Sailor Springs				Seitzinger
330	Kenner	Texaco	Kenner U	641	Main C	Tidewater	Stiffe-Drake
331	Flora S	General American	Given-McGrew U	642	Main C	Tidewater	Walters-Stahl
332	Hord	Shirk & Webster	S. Hord U	643	Main C	Wilson	Hughes-Walker
				644	Main C	Tidewater	H. F. Musgrave
				645	Main C	Wyman	
				659	Main C	Turner	Sanders
				660*	Main C	General Oper-	Culver Pilot
						ations	

\*Abandoned.

†Pressure maintenance.

TABLE 14.—(Continued)

No.	Oil pool C=Consolidated	Operator	Project U=Unit	No.	Oil pool C=Consolidated	Operator	Project U=Unit
<b>Crawford County (Continued)</b>				<b>Fayette County (Continued)</b>			
661*	Main C	Skiles	Correll-Curley	1205	Louden	Doran	Stewart & Dial
662*	Main C	Petroleum Products	—	1206	Louden	General American	Devore Coop.
663*	Main C	Ree	Meserve	1207	Louden	Jarvis Bros. & Marcell	Homan
664*	Main C	Skiles	Walter-Community	1208	Louden	Jarvis & Marcell	Yakey
665*	Main C	Skiles	Weger	1209	Louden	B. Kidd	B. F. Owens
666	Bellair	Wausau	Grant	1210	Louden	Kingwood	Yolton
667*	Main C	H. J. Adams	H. J. Adams	1211	Louden	Kingwood	Yolton
668	Main C	Tidewater	Highsmith	1212	Louden	F. E. Wood	Louden Ext.
669	Main C	Forest	Oblong-Flood 3	1213	Louden	J. J. Lynn Estate	E. C. Smith
670	Main C	Forest	Stifle U	1214	Louden	Mabee	Homan
671	Main C	MacDonnell	Kirtland U	1215	Louden	Mabee	Koberlien
672	Main C	MacDonnell	Kirtland Area U	1216	Louden	Mobil	Rhodes-Watson
679*	Main C	Wausau	Highsmith	1217	Louden	W. C. McBride	Coop.
685	Main C	Indiana Farm Bureau	Dennis Heirs U	1217	Louden	Shell	Stokes-Weiler
				1218	Louden	Shell	N. Louden U
				1219	Louden	Shell	S. Louden U
				1220	Louden	R. H. Troop	Durbin & Force
							Area
				1221	Louden	R. H. Troop	Hiatt U
				1222	St. James	H. Rosenthal	Washburn
				1223†	Louden	Humble	Louden Devonian
							Unit
				1224	Louden	Mobil	Louden
				1225	Louden	L. B. Hoss	Unit
<b>Cumberland County</b>				<b>Franklin County</b>			
700	Siggins	Bell Bros.	Flood 1	1300	Benton	Shell	Benton U
701*	Siggins	C. R. Cochonour	Vevay Park	1301	W. Frankfort C	Shell	W. Frankfort U
702	Siggins	Forest	Siggins	1302	Thompsonville E	Humble	E. Thompsonville
703	York	Trans-Southern	York	1303	Thompsonville N	Humble	N. Thompsonville U
704	Lillyville	Indiana Farm Bureau	Krogman	1304	Thompsonville N	J. & W.	N. Thompsonville U
				1305	Thompsonville N	J. & W.	Thompsonville U
				1306	Sesser C	W. I. Lewis	Sesser U
				1307	W. Frankfort C	Sohio	Horn-Dimond "B"
				1308	W. Frankfort C	Shell	Orient U
				1309	Dale C	C. E. Brehm	Westbrook U
<b>Douglas County</b>				<b>Gallatin County</b>			
800	Bourbon C	M. H. Richardson	—	1400	Inman W C	T. A. Ferral	—
				1401	Inman W C	V. R. Gallagher	Bradley U
				1402	Inman W C	Gulf	W. Inman U
				1403	Inman W C	Gulf	W. Inman U
				1404*	Inman W C	Phillips	Levert
				1405	Herald C	Calvert	Cottonwood N. U
				1406	Inman E C	Humble	Big Barn
				1407	Inman E C	Humble	Kerwin-Crawford
				1408	Inman E C	Humble	West U
				1409	Inman E C	Natural Resources	Big Barn
				1410	Inman E C	Natural Resources	Big Barn
				1411	Inman E C	Sun	Inman E
				1412	Junction	M. Youngblood	Junction U
				1413	Roland C	Indiana Farm Bureau	Omaha U
				1414†	Omaha	Humble	Omaha
				1415	Inman W C	Skiles	Inman W
				1416	Shawneetown N	Sun	L. Miller
				1417	Ab Lake W	Coy	Ab Lake W. U
				1418	Roland C	Humble	S. Roland
<b>Effingham County</b>				<b>Hamilton County</b>			
1100	Sailor Springs C	Ashland	Bible Grove	1500	Bungay C	Texaco	Blairsville U
1101	Hill E	Partlow & Cochonour	Cypress U	1501*	Dale C	C. Pearson	N. Rural Hill U
				1502	Dale C	Phillips	Cantrell U
1102	Sailor Springs C	W. Duncan	Brink	1503	Dale C	Phillips	West End U
1103	Sailor Springs C	Kingwood	Nadler	1504	Dale C	Texaco	W. Dale U
1104	Mason N	Texaco	Mason N U	1505	Mill Shoals	B. Kidd	Gardner
1105	Hill E	B. & G.	Hill E U	1506	Mill Shoals	Sohio	B. R. Gray
							Trustee
				1507	Dale C	Stewart	B. Jones
				1508	Dale C	Texaco	C. W. Hood
<b>Fayette County</b>							
1200	Louden	W. H. Fishburn	Rhodes & McCloy				
1201	Louden	W. L. Belden	Hinton U				
1202	Louden	W. L. Belden	Unit 25				
1203	Louden	D. L. Burtschi	D. L. Burtschi				
1204	Louden	Humble	Louden				

\*Abandoned. †Pressure maintenance.

TABLE 14.—(Continued)

No.	Oil pool C=Consolidated	Operator	Project U=Unit	No.	Oil pool C=Consolidated	Operator	Project U=Unit
<b>Hamilton County (Continued)</b>				<b>Lawrence County (Continued)</b>			
1509	Dale C	Texaco	C. W. Hood	2253	Lawrence	W. C. McBride	Fyffe (39)
1510	Dale C	Gulf	W. Rural Hill U	2254	Lawrence	W. C. McBride	Dalrymple
1511	Dale C	Gulf	W. Rural Hill U	<b>Madison County</b>			
1512	Dale C	Mobil	Rural Hill	2500	Livingston	W. H. Krohn	—
1513	Dale C	C. E. Brehm	Cantrell U	2501	Livingston	Cahill & Smith	C. & O. Henke U
1514	Dale C	Shell	Rural Hill U	2502	Livingston	W. H. Krohn	Kroeger
<b>Jasper County</b>				<b>Marion County</b>			
1900	Clay City C	Ashland	Boos E	2600	Odin	Ashland	Odin
1901	Clay City C	Robinson & Puckett	N. E. McClosky U 1	2601	Patoka	Sohio	Patoka Benoist
1902	Clay City C	Robinson & Puckett	S. W. McClosky U 2	2602	Patoka	Sohio	Patoka Rosiclaré U
1903	Olney C	Gulf	Bessie	2603	Patoka	Sohio	Stein U
1904	Olney C	Sohio	Dundas E U	2604	Salem C	Texaco	Rosiclaré Sand U
1905	Ste. Marie	J. R. Randolph	Ste. Marie	2605	Salem C	Texaco	Salem U
1906	Willow Hill E	Pure	Willow Hill U	2606	Salem C	Texaco	Salem U
1907*	Willow Hill E	M. M. Spickler	—	2607	Salem C	Texaco	Salem U
1908	Clay City C	Zanetis	P. Kelley 3	2608	Salem C	Texaco	Salem U
1909	Clay City C	Zanetis	C. Harvey 2	2609	Tonti	Tamarack	Branch
<b>Jefferson County</b>				2610	Wamac	L. H. Jonas	Wamac U
2000	Boyd	Superior	Boyd Field U	2611	Wamac	Wamac	Wamac U
2001	Boyd	Superior	Boyd Field U	2612	Salem C	T. M. Conrey	Sebastian
2002	Divide E	Gulf	W. D. Holloway	<b>Montgomery County</b>			
2003*	Markham City	Tidewater	Newton In- vestment	2900	Raymond E	Mobil	Foster-Poggen- pohl U
2004	Markham City W	Gulf	W. Markham City U	<b>Richland County</b>			
2006†	Salem C	Humble	Dix (R. & P. M.)	3400	Calhoun C	Ashland	Calhoun
2007*	Markham City	Tidewater	Newton In- vestment	3401	Calhoun C	S. Tipps	Bohlender U
<b>Lawrence County</b>				3402	Clay City C	Ashland	Noble N
2200*	Lawrence	Calvan American	Piper	3403	Clay City C	Calvert	E. Noble U
2201	Lawrence	Baldwin & Bald- win	Cummins Farm	3404	Clay City C	Pure	Old Noble
2202	Lawrence	Bradley	C. M. Perkins	3405	Clay City C	Pure	S. Noble
2203	Lawrence	Bradley	C. M. Perkins	3406	Clay City C	Pure	S. W. Noble U
2204	Lawrence	G. C. Schoon- maker	Applegate	3407	Olney C	Gulf	E. Dundas U
2205*	Lawrence	W. Duncan	L. C. David	3408	Olney C	Texaco	E. Olney U
2206	Lawrence	T. W. George	Klondike	3409	Parkersburg C	Ohio	Parkersburg U
2207	Lawrence	Tekoil	Gray Area	3410*	Seminary	R. P. Johnson	Seminary
2208	Lawrence	W. C. McBride	Crump "40"	3411	Stringtown	N. C. Davies	Stringtown
2209	Lawrence	W. C. McBride	Crump U 1	3412*	Stringtown	Helmerich & Payne	Stringtown
2210	Lawrence	W. C. McBride	Neal	3413	Stringtown	Skelly	Stringtown
2211	Lawrence	Murphy	Stoltz	3414*	Stringtown	Murvin & Steher	—
2212	Lawrence	Murphy	Stoltz	3415*	Parkersburg C	Calvert	Parkersburg
2213	Lawrence	Ohio	9 Projects	3416	Clay City C	Ohio	Noble Coop. U
2214	Lawrence	Ohio	7 Projects	3417	Passport S	Calvert	Passport S U
2216	Lawrence	Ohio	4 Projects	<b>Saline County</b>			
2217	Lawrence	Shakespeare	S. Bridgeport U	3600	Harco	Phillips	Noble "A"
2218	St. Francisville E	J. E. Bauer	All States Life	3601	Harco E	Sun	Harco W.F.P. U
2229*	Lawrence	Calvan American	Waller	3602	Harco E	Sun	Harco W.F.P. U
2230*	Lawrence	Ree	Snyder	3603	Eldorado C	H. V. Spires	Endicott U
2231	Allendale	Illinois Oil	Sand Barren Leases U 1	<b>Shelby County</b>			
2232	Allendale	Sand Barren Leases	Sand Barren U 2	3800	Stewardson	W. L. Belden	—
2233	Lawrence	Bradley	Pepple	<b>Wabash County</b>			
2234	Lawrence	Bradley	L. Gillespie	3900	Allendale	W. H. Bass	Gilliate
2235	Lawrence	Bradley	L. Gillespie	3901	Allendale	W. H. Bass	White
2236	Lawrence	Bradley	L. Gillespie	3902	Allendale	W. H. Bass	—
2237	Lawrence	M. G. Curtis	Stoltz Heirs	3903	Allendale	Coon Creek	Taylor-Wheat- ley U
2240	Lawrence	D. S. Huddleston	Vandermark- Albrecht U	3904	Allendale	Tamarack	Patton
2241	Lawrence	Bradley	Fyffe	3905	Allendale	Forest	Allendale
2242	Lawrence	Bradley	O'Donnell	3906	Allendale	H. S. Barger	Young
2243	Lawrence	Gulf	Bell U	3907	New Harmony C	T. W. George	E. Maud
2244	Lawrence	Gulf	Bridgeport U	3908	Allendale	Illinois Oil	Shaw-Smith- Nigh
2249	Lawrence	W. C. McBride	Hinkle				
2250	Lawrence W	Houchins	S. Summer U				
2251	Lawrence	W. C. McBride	Combs				
2252	Lawrence	W. C. McBride	Bower-Ross				

\*Abandoned. †Pressure maintenance.

TABLE 14.—(Continued)

No.	Oil pool C=Consolidated	Operator	Project U=Unit	No.	Oil pool C=Consolidated	Operator	Project U=Unit
<b>Wabash County (Continued)</b>				<b>Wayne County (Continued)</b>			
3909	Allendale	B. Kidd	Allendale	4105	Barnhill	Willets & Paul	Barnhill U
3910	Allendale	Unknown	Mattaliano et al.	4106	Barnhill	Willets & Paul	Simpson U
3911	Allendale	J. S. Westfall	—	4107	Clay City C	Calvert	Wilson
3912	Browns E	T. W. George	Bellmont	4108	Clay City C	Tamarack	Pierce
3913	Browns E	Mobil	Bellmont	4109	Clay City C	F. & W.	Miller-Lam- brich U
3914	Browns E	Mobil	S. Belmont U	4110	Clay City C	General American	Covington U
3915	Keensburg S	White & Vickery	A. P. Garst	4111	Clay City C	T. W. George	—
3916	Lancaster S	Ashland	Lancaster S	4112	Clay City C	Pure	Jordan School U
3917*	Mt. Carmel	Tamarack	G. Dunkel	4113	Clay City C	Pure	N. E. Jordan School U
3918	Mt. Carmel	H. Lovelace	Wabash U	4114	Clay City C	Pure	Van Fossan U
3919	Mt. Carmel	T. W. George	N. Mt. Carmel	4115	Clay City C	Robinson & Puckett	N. Puckett U
3920	Mt. Carmel	T. W. George	—	4116	Clay City C	Robinson & Puckett	S. Puckett U 1
3921	Mt. Carmel	O'Meara Bros.	Mt. Carmel U	4117	Clay City C	Shakespeare	E. Banker School
3922	Mt. Carmel	Shell	Mt. Carmel U	4118	Clay City C	Shakespeare	E. Geff U
3923	Mt. Carmel	Skiles	Chapman- Courter U	4119	Clay City C	Kirby	Kirby
3924	Mt. Carmel	Skiles	W. Mt. Carmel	4120*	Covington S	General American	Heidinger-Vogel
3925	Mt. Carmel	Texaco	Stein	4121	Johnsonville C	Texaco	Johnsonville U
3926	New Harmony C	Ashland	Maud N	4122	Johnsonville C	Texaco	Johnsonville U
3927	New Harmony C	Ashland	Ravenstein	4123	Goldengate C	Cities Service	Goldengate U
3928	New Harmony C	Cities Service	Brines U	4124*	Goldengate C	Cities Service	Kletzker U
3929	New Harmony C	G. R. Co.	Shultz	4125	Keenville	Calvert	Keenville U
3930	New Harmony C	G. R. Co.	Shultz	4126	Keenville	W. Duncan	Keenville U
3931	New Harmony C	Skiles	Siebert Bottoms	4127	Maple Grove C	Winmar	W. Bennington
3932	New Harmony C	Skiles	E. Maud	4128*	Goldengate C	Cities Service	Goldengate
3933	New Harmony C	Skiles	E. Maud	4129*	Barnhill	Wayne Develop- ment	Walter Winona
3934	New Harmony C	Skiles	W. Maud	4130*	Clay City C	Gulf	S. E. Jordan
3935	New Harmony C	Sohio	Updegraff "A"	4131	Clay City C	Pure	School U
3936	New Harmony C	Luboil	Helm U	4132*	Clay City C	Texaco	E. Galligher
3937	New Harmony C	Luboil	Helm U	4133	Goldengate C	Illinois Mid- Continent	—
3938	New Harmony C	Luboil	Helm U	4134	Johnsonville C	Pure	Crisp U
3939	New Harmony C	Luboil	Helm U	4135	Johnsonville C	Texaco	Johnsonville U
3940	New Harmony C	Luboil	Helm U	4136	Clay City C	Slagter	Blessing- Chrisman U
3941*	Mt. Carmel	First Natl. Pet. Trust	Shaw Courter	4137	Zenith N	Mobil	Zenith N U
3942*	Berryville C	Phillips	Tarply	4138	Goldengate C	Skiles	O'Daniel U
3943*	Berryville C	Phillips	Townsend				
3944*	Allendale	Indiana Farm Bureau	Woods				
3945*	Friendsville N	Mobil	J. L. Litherland				
3946*	Mt. Carmel	First Natl. Pet. Trust	Shaw Courter				
3947	New Harmony C	T. W. George	E. Maud				
3948	New Harmony C	A. K. Swann	Helm U				
3949	New Harmony C	West	C. W. Raber				
3950	Allendale	Ashland	Allendale				
3951	Allendale	L. & M.	Allendale W. U				
3952	Allendale	L. & M.	S. Price				
3953	Friendsville N	J. W. Sanders	Friendsville N U				
3954	Lancaster	Hayes-Wolf Bros.	Lancaster U				
3955	New Harmony C	Indiana Farm Bureau	Landis-Goins				
3956	New Harmony C	Skiles	Cowling-Raber				
3957	New Harmony C	Skiles	Broster "F"				
3958†	Mt. Carmel	T. W. George	Dunkel-Johnson				
3959†	New Harmony C	T. W. George	Keensburg U				
3960	New Harmony C	Continental	A. E. Shultz "A" Benoist "A" Cypress				
3961	New Harmony C	Continental	A. E. Shultz "A" Cypress				
3962	New Harmony C	P. Rossi	4 W				
3963	New Harmony C	Coy	Kerwin U				
3964	Allendale	Indiana Farm Bureau	Allendale U				
3965	New Harmony C	A. K. Swann	Helm U				
<b>Washington County</b>				<b>White County</b>			
4000	Cordes	Shell	Cordes Coop.	4200	Albion C	Bayview	Biehl U 1
4001	Irvington	L. Kapp	Molting Field	4201*	Albion C	Concho	N. Crossville U
4002	Irvington	M. Mazzarino	Kasten U	4202*	Albion C	Concho	N. Crossville U
4003	Dubois C	H. Mabry	Peek	4203	Centerville E	Tekoil	E. Centerville
4004	Irvington	Mobil	C. Koelling	4204	Centerville E	Tekoil	E. Centerville
<b>Wayne County</b>				4205*	Concord C	B. Kidd	Kerwin-Concord
4100	Aden C	Horton	Aden N	4206	Concord C	Phillips	Kerwin
4101	Aden C	Texaco	Aden S	4207	Concord C	Phillips	Tuley
4102	Aden C	Texaco	Aden S	4208	Concord C	C. E. Brehm	Concord N
4103	Barnhill	Ashland	Barnhill	4209	Enfield	Ryan	S. Enfield U 2
4104	Barnhill	Willets & Paul	Barnhill U	4210	Herald C	C. E. Brehm	Herald W. U
				4211	Herald C	Mabee-Allen	Ackerman U
				4212	Herald C	Q. B. Mitchell	Bayley U
				4213	Maunie S C	Mobil	Palestine Sand U
				4214	New Harmony C	J. Simpkins	} Arrow-McBride- Hon-Bump- Crawford
				4215	New Harmony C	J. Simpkins	
				4216	New Harmony C	J. Simpkins	
				4217*	New Harmony C	J. Simpkins	} Ford Ford "B" Maunie N U
				4218	New Harmony C	Calstar	
				4219	New Harmony C	Calstar	
				4220	New Harmony C	Clark & Clark	—
				4221	New Harmony C	Coy	Smith- Davenport
				4222*	New Harmony C	Skiles	Greathouse
				4223*	New Harmony C	Sun	—
				4224	New Harmony C	Herndon & Ashland	Calvin
				4225	New Harmony C	Herndon	Calvin U
				4226	New Harmony C	Herndon	Calvin U
				4227	New Harmony C	Inland	Bowman's Bend U
				4228*	Concord C	Great Lakes Carbon	McClosky
				4229*	Concord C	Phillips	Dallas
				4230*	Maunie S C	Mobil	Tar Springs U
				4231	New Harmony C	Sinclair	M. S. Donald

\*Abandoned.

†Pressure maintenance.

TABLE 14. — (Continued)

No.	Oil pool C=Consolidated	Operator	Project U=Unit	No.	Oil pool C=Consolidated	Operator	Project U=Unit
<b>White County (Continued)</b>				<b>White County (Continued)</b>			
4232*	Phillipstown C	Skiles	L. O. Cleveland	4262	Roland C	T. W. George	Pankey-More-head U
4233	New Harmony C	Sun	Ford "B"	4263	Storms C	Sinclair	Storms Pool U
4234*	New Harmony C	Sun	Ford "B"	4264†	Enfield	Ryan	S. Enfield U 1
4235	New Harmony C	Superior	Kern-Hon U	4265†	Maunie S C	Natl. Assoc. Pet.	S. Clear Pond
4236	New Harmony C	Superior	New Harmony Field U	4266†	Phillipstown C	Natl. Assoc. Pet.	Stokes "B" 3
4237	New Harmony C	Superior	New Harmony Field U	4267*	Centerville E	D. B. Lesh	Centerville E
4238	New Harmony C	Superior	Waltersburg Sand U	4268*	Maunie S C	Mobil	Tar Springs U 2
4239*	Maunie S C	Mobil	Maunie Coop.	4269*	New Harmony C	Sun	Ford "A"
4240	New Harmony C	Tidewater	E. S. Dennis "A"	4270*	Phillipstown C	Sun	Phillipstown Storms
4241	New Harmony C	Tidewater	O. R. Evans	4271*	Storms C	Mabee	—
4242	New Harmony C	Tidewater	O. R. Evans	4272	Maunie N C	G. C. Schoonmaker	Brown-Alford
4243	New Harmony C	Tidewater	O. R. Evans	4273	Maunie S C	Skiles	J. J. Bond
4244	New Harmony C	Tidewater	E. S. Dennis "A"	4274	New Harmony C	Mobil	Calvin C
4245*	Phillipstown C	C. E. Brehm	Phillipstown U "A"	4275	New Harmony C	Pure	O. Smith
4246*	Centerville E	Sun	E. Centerville	4276	New Harmony C	Mabee	W. P. B. S. U
4247	New Haven C	Hiawatha	New Haven U	4277	Phillipstown C	Kirby	G. N. Boetticher
4248	New Haven C	Hiawatha	New Haven U	4278	New Haven C	Sinclair	—
4249	Phillipstown C	C. E. Brehm	Phillipstown U "B"	4279	Trumbull C	E. Price	Ford U
4250	Phillipstown C	Bayview	Grayville U	4280	New Harmony C	Superior	Concord U
4251	Phillipstown C	British American	N. Calvin U	4281	Concord C	Ashland	Ribeyre Island U
4252	Phillipstown C	Mobil	N. Calvin	4282	Maunie N. C	Ashland	—
4253	Phillipstown C	Phillips	Flora U	4283	New Harmony C	J. H. Vandembark	Calvin-Hon U
4254	Phillipstown C	Phillips	Laura	4284	New Harmony C	Texaco	M. E. Glaze Coop.
4255	Phillipstown C	Phillips	Phillipstown U	4285	New Harmony C	Texaco	M. E. Glaze Coop.
4256	Phillipstown C	Sun	Phillipstown U	4286	New Harmony C	Skiles	Calvin Griffin C
4257	Phillipstown C	Sun	Phillipstown U	4287	New Harmony C	Skiles	Calvin Griffin C
4258	Roland C	Humble	S. W. Roland U	4288	New Harmony C	Skiles	Calvin Griffin C
4259	Roland C	Humble	Stokes U	4289	New Harmony S	Indiana Farm (Ind.) Bureau	Mink Island U
4260	Roland C	Pure	Stokes-Browns-ville U	4290	New Harmony C	Texaco	M. E. Glaze Coop.
4261	Roland C	Shell	Iron U	4291	New Harmony C	Texaco	M. E. Glaze Coop.
				4292	Enfield	Ryan	S. Enfield U 3

\*Abandoned.

†Pressure maintenance.

TABLE 15.—ILLINOIS WATERFLOOD PROJECTS

Map no.	General					
	Field C=Consolidated	Operator	County	Project U=Unit	Date first injection	Formation
1417	Ab Lake W	Coy	Gallatin	Ab Lake W. U	7-59	Waltersburg
4100	Aden C	Horton*	Wayne	Aden N.	11-56	Aux Vases
4101	Aden C	Texaco	Wayne	Aden S.	8-46	Aux Vases
4102	Aden C	Texaco	Wayne	Aden S.	8-46	McClosky
1000	Albion C	Bayview	Edwards	Biehl U 2	12-50	U. Biehl
4200	Albion C	Bayview*	White	Biehl U 1	8-49	U. Biehl
1001	Albion C	Calvert	Edwards	S. Albion Biehl U	12-55	U. Biehl
1002	Albion C	Jarvis Bros. & Marcell	Edwards	H. Wick (West)	7-51	McClosky
1003	Albion C	Superior	Edwards	S. Albion S.R.P. U 1	1-55	Biehl & Waltersburg
1004	Albion C	Superior	Edwards	S. Albion U 2	8-56	Aux Vases
1005	Albion C	Superior	Edwards	S. Albion U 2*	8-56	Biehl
1012	Albion C	Superior	Edwards	S. Albion U 2	7-46	Bridgeport
1018	Albion C	Superior	Edwards	E. Albion U	11-59	Aux Vases
1006	Albion C	Tidewater	Edwards	S.W. Albion Sand U	5-56	Biehl
3910	Allendale	Unknown*	Wabash	Mattaliano et al.	6-52	Biehl
3950	Allendale	Ashland	Wabash	Allendale	9-55	Biehl
3906	Allendale	H. S. Barger*	Wabash	Young		Biehl
3900	Allendale	W. H. Bass*	Wabash	Gilliate	11-54	Biehl
3901	Allendale	W. H. Bass*	Wabash	White	6-52	Biehl
3902	Allendale	W. H. Bass*	Wabash			Biehl
3903	Allendale	Coon Creek	Wabash	Taylor-Wheatley U	6-57	Jordan & Biehl
3905	Allendale	Forest	Wabash	Allendale	6-55	Biehl & Jordan
2231	Allendale	Ill. Oil	Lawrence	Sand Barren Leases U 1	9-57	Jordan & Biehl
3908	Allendale	Ill. Oil	Lawrence & Wabash	Shaw-Smith-Nigh	10-57	Biehl & Jordan
3964	Allendale	Indiana Farm Bureau	Wabash	Allendale U	7-59	Benoist
3909	Allendale	B. Kidd	Wabash	Allendale	9-53	Biehl & Jordan
3951	Allendale	L & M	Wabash	Allendale W U	4-58	Biehl
3952	Allendale	L & M	Wabash	S. Price	11-54	Biehl
2232	Allendale	Sand Barren Leases	Lawrence	Sand Barren U 2	6-58	Biehl & Jordan
3911	Allendale	J. S. Westfall*	Wabash			Biehl
100	Assumption C	Continental	Christian	Benoist	7-50	Benoist
101	Assumption C	Continental	Christian	Devonian	5-55	Devonian
102	Assumption C	Continental	Christian	Rosiclare	6-55	Rosiclare
4103	Barnhill	Ashland	Wayne	Barnhill	1-51	McClosky
4104	Barnhill	Willets & Paul*	Wayne	Barnhill U*	10-56	Aux Vases
4105	Barnhill	Willets & Paul*	Wayne	Barnhill U*	10-56	Ohara & Rosiclare
4106	Barnhill	Willets & Paul*	Wayne	Simpson U*	9-57	Rosiclare
400	Bartelso	T. R. Kerwin	Clinton	Belle Oil	4-52	Cypress
401	Bartelso	Robbin	Clinton	Robbin U	11-53	Cypress
402	Bartelso	H. S. Woodard	Clinton	H. S. Woodard, Trustee	1-54	Cypress
409	Beaver Creek	Conrey and Conrey	Clinton	Reinkensmeyer	4-59	Benoist
600	Bellair	Forest	Crawford	Be'llair	7-48	Bellair "500"
601	Bellair	Pure	Crawford	Fulton	7-48	Bellair "500"
666	Bellair	Wausau	Crawford	Grant	2-53	Robinson
1300	Benton	Shell	Franklin	Benton U	11-49	Tar Springs
800	Bourbon C	M. H. Richardson*	Douglas			Rosiclare
2000	Boyd	Superior	Jefferson	Boyd Field U	8-54	Aux Vases
2001	Boyd	Superior	Jefferson	Boyd Field U	1-55*	Benoist
3912	Browns E	T. W. George	Wabash	Bellmont*	1-51	Cypress
3913	Browns E	Mobil	Wabash	Bellmont	11-47	Cypress
3914	Browns E	Mobil	Wabash	S. Belmont U	4-56	Cypress
1500	Bungay C	Texaco	Hamilton	Blairsville U	6-48	Aux Vases
3400	Calhoun C	Ashland	Richland	Calhoun	9-51	McClosky
3401	Calhoun C	S. Tipps*	Richland	Bohlander U	6-50	McClosky
200	Casey	F. A. Bridge*	Clark	States Oil	1-54	Casey
201	Casey	Forest	Clark	Casey	3-50	Casey
202	Casey	D. W. Franchot	Clark	N. Casey	12-53	Casey
4203	Centerville E	Tekoil	White	E. Centerville	3-56	Cypress
4204	Centerville E	Tekoil	White	E. Centerville	5-56	Tar Springs
403	Centralia	W. O. Morgan*	Clinton	Centralia Field	10-55	Benoist

# WATERFLOOD OPERATIONS

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## REPORTED OPERATING DURING 1959

Information	Production and injection statistics (thousand bbls)						Map no.
	Secondary recovery						
	Water injection		Oil production		Water production		
	Total 1959	Cumulative 12-31-59	Total 1959	Cumulative 12-31-59	Total 1959	Cumulative 12-31-59	
Sec.-Twp.-Range							
30, 31-8S-10E	104	104	0.5*	1*	6	6	1417
34-2S-7E							4100
8, 9, 16, 17, 20-3S-7E	539	4,579	34.7	809	1,206	5,576*	4101
8, 9, 16, 17, 20-3S-7E	756	5,248	25.2	532	*	*	4102
23-3S-10E	361	3,104	15.6	547*	203	1,091†	1000
22, 23-3S-10E	555	5,221	40.6	1,148†	196	909†	4200
1, 2-3S-10E	275	841	62.4	275*†	103	234	1001
24-2S-10E	68	369*	11.7	24	68	132	1002
{25, 36-2S-10E}	249	1,840	97.7	557	133	685	1003
{30, 31-2S-11E}							
1, 2, 11, 12-3S-10E	147	544	149.1*	433*†	509*	1,453*†	1004
1, 2, 11, 12-3S-10E	369	1,083	†	†	†	†	1005
1, 2, 11, 12-3S-10E	109	2,413	*	*	*	*	1012
{36-1S-10E}	26	26	0	0	1	1	1018
{31-1S-11E}							
2, 11, 14-3S-10E	948	3,145*	179.0	816†	611	1,439	1006
15-1N-12W		45†		13†		23†	3910
13-1N-12W	59	200	5.7	60*			3950
{36-2N-12W}		373†		27†			3906
{1-1N-12W}							
13-1N-12W		181†		37†			3900
22-1N-12W				16†			3901
7-1N-11W							3902
7, 18-1N-12W	84	204	29.5	81*	32	50	3903
3, 4, 9, 10-1N-12W	3,100	15,146	129.4	952*			3905
26-2N-12W	235	376	58.6	81	78	84	2231
23, 26, 35-2N-12W	120	263	21.9	108	77	142*	3908
13-1N-12W	158	158	3.8	4	13*	13*	3964
3-1N-12W	531*	2,723*	12.5	177	369	1,697	3909
8-1N-12W	221	335	65.3	83	1	7	3951
19-1N-12W	180	887	6.6	167	180		3952
23, 26-2N-12W	53	77	12.9	14	8*	8*	2232
19-1N-12W							3911
3, 4, 9, 10, 15, 16, 21-13N-1E	336	6,484	59.5	1,038*	145	2,093	100
3, 9, 10-13N-1E	796	1,959	76.4	201	57	145	101
9, 10-13N-1E	67	331	72.0	250	50	223	102
26, 34, 35-2S-8E	845*	6,504	47.0	1,070			4103
27-2S-8E	385	525	26.9†	51†	146	201†	4104
27, 28-2S-8E	142	350	†	†	†	†	4105
27-2S-8E							4106
4-1N-3W	84	894	4.4	128*	70	151†	400
4-1N-3W	426	2,632	32.4	595*	337	1,234	401
5, 8-1N-3W	266	1,493	21.7	261*	264	1,039	402
14-3N-3W	21	21	2.6	3	27	27	403
2, 11, 12-8N-14W	1,400	18,637	32.2	651			600
1, 2, 11, 12-8N-14W	3,435	43,344	62.9	1,164	2,106	19,334	601
13-8N-14W	141	1,194†	7.0	155*	124	254†	666
{23-26, 35, 36-6S-2E}	11,204	106,584	509.6	14,176	9,713	63,832	1300
{18, 30, 31-6S-3E}							
2, 11, 12-15N-7E							800
{18, 19, 20, 30-1S-2E}	1,104	16,061	*	*	*	*	2000
{13, 24, 25-1S-3E}							
{18, 19, 20, 30-1S-2E}	5,032	23,737	138.2†	1,223†	4,643†	17,879†	2001
{13, 24, 25-1S-3E}							
1, 2, 11, 12-2S-14W		3,009†		905†		1,122†	3912
2, 11-2S-14W	0	822	4.0	575†	3	266	3913
11, 14-2S-14W	163	741	29.0	170*	127	261	3914
16, 17, 20, 21-4S-7E	417	7,080	21.4	649	295	1,587*	1500
{13-2N-9E}	274*	1,810*	11.8	135†			3400
{7, 18-2N-10E}							
6, 7-2N-10E	17†	2,175*	0.6†	235†	17†	1,681†	3401
26-10N-14W							200
14, 15, 23-10N-14W	797	7,513	26.8	445			201
{4-10N-14W}	226	1,179	2.6	3	0	0	202
{33-11N-14W}							
18-4S-10E	190	734	66.7*	270*†	201*	680*	4203
18-4S-10E	185	633	*	*	*	*	4204
35-2N-1W		36					403

TABLE 15.—

Map no.	Development as of 12-31-59						Injection water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source Sd=Sand Gr=Gravel Prod=Produced	Type F=Fresh B=Brine	Av. bbls per day per well	Max. well-head pressure reported PSI
	Inj.	Prod.			Sub-jected to inj.	Total				
1417	3	5	Mod. 5-Spot	10	100	100	Shallow Gr	F	10.4	1,070
4100										
4101	13	17	Perimeter		640	1,050	Penn. Sd & Prod	B	11.4	1,490
4102	12	17	Perimeter		560	920	Penn. Sd & Prod	B	10.1	1,480
1000	2	5	Flank		68		Well & Prod	F & B	22.5	750
4200	2	9	Flank		172		River & Prod	F & B	44.7	1,375
1001	2	6	Perimeter	10	110	130	Penn. Sd	B	20.9	
1002	1	6			140	140		B	6.2	200
1003	7	17	Flank		222	222	Gr Beds & Prod	F & B	5.1	1,390
					325	325				
1004	7	11	5-Spot	20	243	243	Gr Beds & Prod	F & B	5.7	1,430
1005	4	4	Irregular	20	79	79	Gr Beds & Prod	F & B	15.8	830
1012	2	7	Mod. Flank		257	257	Gr Beds & Prod	F & B	12.4	0
1018	7	7	5-Spot	20	340	340	Penn. Sd & Prod	B	4.4	100
1006	18	18	5-Spot	20	403		Purchased & Prod	F & B	9.0	980
3910										
3950	1	2	Irregular		20	20	Penn. Sd	B	10.8	300
3906	8	10								
3900			Perimeter							
3901										
3902										
3903	3	6	Irregular		24	60	Penn. Sd	B	5.1	800
3905	29	18	Mod. 5-Spot	25	300	66	Gr & Prod	F & B	10.5	800
2231	10	7			40	60		F	2.5	800
3908	2	5			20	30		F	9.7	800
3964	8		Flank	20	180			F	6.2	320
3909	2	3	Irregular	20	70	75	Shallow Sd	F & B	22.7	
3951	2	10	Irregular	40	80	80	Shallow Gr	F	12.1	500
3952	1	3	Irregular	10	40	40	Water Sd	F	24.7	600
2232	3	10			15	65		F	2.4	800
3911										
100	19	14	Perimeter	10	350	410	Purchased & Prod	F & B	3.7	800
101	12	26	Line Drive	20	600	800	Purchased & Prod	F & B	13.9	200
102	1	6	Line Drive	10	158	158	Purchased & Prod	F & B	15.2	360
4103	10	13	Irregular		260	320	Cypress	B	25.7	
4104	7	17	Mod. Split Line		230	230	Water Well & Prod	B	10.8	1,000
4105	4	8	Mod. Split Line		165	165	Water Well & Prod	B	19.8	1,000
4106										
400	5	5	5-Spot	5	40	40	Tar Springs	B	3.1	550
401	12	19	5-Spot	10	200	200	Bethel	B	8.1	550
402	7	9	5-Spot	10	80	80	Bethel & Prod	B	6.5	550
409	1	3	5-Spot	10	30	40	Prod	B	11.1	
600	56	51	5-Spot	4.4	200		Gr	F	1.8	280
601	120	89	5-Spot	4.4	443	443	Gr	F	3.7	280
666	15	11	5-Spot	4	70	100	Penn. Sd & Prod	F & B	1.6	510
1300	108	109	5-Spot	20	2,200	2,200	Lake & Prod	F & B	8.1	545
800										
2000	12	*	Peripheral		569	569	Lake & Prod	F & B	21.0	575
2001	12	55†	Peripheral		1,564	1,564	Lake & Prod	F & B	67.6	875
3912										
3913	1	1	Line Dr	10	168	190	Prod & Tar Springs	B		
3914	5	8	5-Spot	20	75	127	Prod & Penn	F & B		
1500	12	5		20	64	710	Penn & Prod	B	6.0	1,320
3400	3	6	Irregular		140	195	Cypress	B	41.7	
3401	1	2	Irregular	20	160	280	Prod	B	11.3	1,350
200										
201	76	67	5-Spot	4.4	280		Gr & Prod	F & B	2.9	320
202	15	11	5-Spot	4.4	40	560	Gr	F	2.1	240
4203	5	18	5-Spot	10	288	288	Palestine	B	6.9	1,565
4204	4	15	5-Spot	10	214	214	Palestine	B	15.9	1,500
403	1	7		1	40	40	Benoist & Cypress	B		

(Continued)

Reservoir statistics (average values)						Remarks	Map no.
Depth feet	Net pay thickness feet	Porosity per cent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
2,030	16.0	16.3	20	37.1	4.3 @ 87°F	*Estimated. *No data 1957-59.	1417
3,200	10.0	22.0	150	34.0-40.3		*Includes Aden McClosky water production.	4100
3,350	3.6			34.0-40.3	6.5 @ 100°F	*Water production included with 4101.	4101
1,450	22.0	19.3	303	35.8	6.0 @ 84°F	*Includes primary prod. since 12-50. †Since 1-55.	4102
2,000	17.0	20.2	265	38.0	5.3 @ 90°F	*Previously operated by Bristol Petroleum. †Includes primary production since 8-49. †Since 1-55.	1000
2,075	18.0	20.0	200	33.4		*Includes primary production since 12-55. †Corrected to 1957 figure.	4200
3,150	30.0			37.0		*Excluding 1-55 to 12-56.	1001
2,025	7.1	18.6	74		5.4 @ 85°F		1002
2,400	12.3	18.5	807	36.0	4.7 @ 90°F		1003
2,550	10.0	20.6	53	37.5	4.3 @ 98°F	*Includes Bridgeport & Biehl; 1005, 1012. †Included in Biehl 8-56 to 12-57.	1004
1,485	15.8	18.2	326	37.3	4.5 @ 84°F	*Previously abandoned. †Included with 1004.	1005
1,360	12.2	20.2	323	35.7	5.5 @ 83°F	*Included with 1004.	1012
2,590	14.3	18.1	12	37.5	4.3 @ 98°F		1018
1,850	16.0	18.0	150	32.2		*Adjusted by operator. †Includes primary production since 5-56.	1006
						*No data 1957-59. †As of 1-54.	3910
1,475	15.0			36.0		*Includes primary production since 9-55.	3950
						*No 1959 data; formerly T. W. George. †Excluding 1959.	3906
1,490	17.0					*No data 1957-59. †As of 12-56.	3900
						*No data 1957-59. †From 1-54 to 12-56.	3901
						*No data 1957-59.	3902
1,500	15.0	17.0	300			*Adjusted to 1958 value of 51,000.	3903
	15.0	17.7	390				
1,500	13.0	14.9	100	37.0	12.3 @ 60°F	*Includes primary production since 6-55.	3905
1,300	26.0						2231
1,360	17.0					*Estimated.	3908
2,120	20.0					*Estimated.	3964
1,490	32.0	16.5	600	37.0	7.6 @ 79°F	*All water injected in Forest Oil Corp. line wells. Injection to this project estimated.	3909
1,500	25.0	19.0	450	32.0			3951
1,520	20.0	18.0	450	33.0			3952
1,300	20.0					*Estimated.	2232
						*See 3952.	3911
1,050	13.0	19.0	100	38.0		*Adjusted to 1958 value.	100
2,300	13.0	12.0	50	40.0	1.8 @ 88°F		101
1,150	12.0	22.0	561	39.3	2.6 @ 78°F		102
3,350	9.0			39.0		*Controlled dump flood.	4103
3,253	14.0	18.7	42	38.0	7.0 @ 85°F	*Formerly Simpson Unit. †Figures corrected to exclude primary production. †Adjusted to 1958 value.	4104
3,340	6.0	20.1	108	39.0		*Formerly Simpson Unit. †Included with 4104.	4105
3,365	5.0			40.0	6.0 @ 78°F	*Incorporated with 4104.	4106
970	15.0	22.2	165	37.0	6.3 @ 71°F	*Includes primary production since 4-52. †Since 1-57.	400
980	12.0	20.0	110	36.9	6.3 @ 71°F	*Includes primary production since 11-53.	401
980	16.0	21.0	210	39.0		*Includes primary production since 7-48.	402
1,100	9.0			36.0			409
550	38.0	17.1	148	32.4	16.0 @ 77°F	Previously subjected to gas injection.	600
560	21.0	18.6	149	32.0	18.7 @ 77°F	Previously subjected to gas injection.	601
950	16.0	17.2	125	39.0	8.0 @ 70°F	*Includes primary production since 2-53. †Corrected to 1958 figures.	666
2,100	35.0	19.0	65	39.7	3.5 @ 86°F		1300
						*No data 1958-59.	800
2,130	11.9	21.4	240	36.8	4.4 @ 90°F	Previously used for gas storage. *Included with 2001.	2000
2,065	17.3	17.5	173	39.5	3.2 @ 90°F	*Pressure maintenance 6-45 to 1-55. †Since 1-1-55; includes 2000.	2001
						*This part of the unit has been abandoned. †As of 12-56. †Includes primary production since 1-51.	3912
2,540				35.0	3.2 @ 92°F	*Includes primary production since 11-47.	3913
2,560				37.0		*Includes primary production since 4-56.	3914
3,330	15.5	19.6	92	35-40	1.8 @ 99°F	*Corrected from 1958 value.	1500
3,150	6.0			37.0		*Controlled dump flood. †Includes primary production since 9-51.	3400
3,130	10.0	11.2	67	39.0		*Operated by Phillips Petroleum until 5-15-59. †Excluding 5-59 to 12-59.	3401
						*No data 1957-59.	200
400	10.0	17.4	173	31.9	16.6 @ 70°F	Previously subjected to gas injection.	201
290	20.0	21.5	400	26.6	45.0 @ 60°F		202
2,845	15.0	15.4	12.2	36.2	3.4 @ 110°F	*Includes production from 4204. †Includes primary production since 3-56. Adjusted by operator.	4203
2,460	8.0	15.9	97.8	35.0	4.1 @ 105°F	*Included with 4203.	4204
1,368	10.0			38.0		*No data 1959.	403

TABLE 15.—

Map no.	General					
	Field C=Consolidated	Operator	County	Project U=Unit	Date first injection	Formation
404	Centralia	Shell	Clinton	Centralia U	5-56	Cypress & Benoist
1900	Clay City C	Ashland	Jasper	Boos E.	9-53	McClosky
3402	Clay City C	Ashland	Richland	Noble N.	7-54	McClosky
300	Clay City C	Calvert	Clay	N. Clay City U	10-55	Rosiclare
3403	Clay City C	Calvert	Richland	E. Noble U	5-55	Rosiclare
4107	Clay City C	Calvert	Wayne	Wilson	4-55	Rosiclare
4109	Clay City C	F & W	Wayne	Miller & Lambrich U	8-50	Ohara, Rosiclare & McClosky
4110	Clay City C	General American	Wayne	Covington U	6-55	Ste. Genevieve
4111	Clay City C	T. W. George*	Wayne			Aux Vases
4119	Clay City C	Kirby	Wayne	Kirby	1-55	Aux Vases
3416	Clay City C	Ohio	Richland	Noble Coop. U	8-54	McClosky
302	Clay City C	Pure	Clay & Wayne	Banker School C	1-57	Cypress
3404	Clay City C	Pure	Richland	Old Noble	8-54	McClosky
3405	Clay City C	Pure	Richland	S. Noble	8-57	McClosky
3406	Clay City C	Pure	Richland & Wayne	S. W. Noble U	8-57	Rosiclare
4112	Clay City C	Pure	Wayne	Jordan School U	10-55	Aux Vases
4113	Clay City C	Pure	Wayne	N.E. Jordan School U	10-56	Aux Vases
4114	Clay City C	Pure	Wayne	Van Fossan U	1-53	McClosky
4131	Clay City C	Pure	Wayne	S.E. Jordan School U	5-58	Aux Vases
1901	Clay City C	Robinson & Puckett	Jasper	N.E. McClosky U 1	5-53	McClosky
1902	Clay City C	Robinson & Puckett	Jasper	S.W. McClosky U 2	5-53	McClosky
4115	Clay City C	Robinson & Puckett	Wayne	N. Puckett U	1-56	Aux Vases
4116	Clay City C	Robinson & Puckett	Wayne	S. Puckett U 1	8-54	Aux Vases
4117	Clay City C	Shakespeare	Wayne	E. Banker School	1-57	Cypress
4118	Clay City C	Shakespeare	Wayne	E. Geff U	1-57	Aux Vases
4136	Clay City C	Slagter	Wayne	Blessing-Chrisman U	3-59	Aux Vases
4103	Clay City C	Tamarack	Wayne	Pierce	2-54	Rosiclare
1903	Clay City C	Zanetis*	Jasper	P. Kelley 3	11-58	Rosiclare
1909	Clay City C	Zanetis*	Jasper	C. Harvey 2	11-58	Rosiclare
4281	Concord C	Ashland	White	Concord U	9-59	Tar Springs
4203	Concord C	C. E. Brehm	White	Concord N	12-52	Aux Vases
4206	Concord C	Phillips	White	Kerwin	2-53	Rosiclare & McClosky
4207	Concord C	Phillips	White	Tuley	7-51	McClosky
4000	Cordes	Shell	Washington	Cordes Coop.*	8-50	Benoist
4120	Covington S	General American	Wayne	Heidinger-Vogel*	11-57	McClosky
1309	Dale C	C. E. Brehm	Franklin & Hamilton	Westbrook U	8-59	Aux Vases
1513	Dale C	C. E. Brehm	Hamilton	Cantrell U	1-59	Aux Vases
1510	Dale C	Gulf	Hamilton	W Rural Hill U	6-59	Aux Vases
1511	Dale C	Gulf	Hamilton	W Rural Hill U	6-59	Ohara
1512	Dale C	Mobil	Hamilton	Rural Hill	5-59	Aux Vases
1502	Dale C	Phillips	Hamilton	Cantrell U	8-55	Aux Vases
1503	Dale C	Phillips	Hamilton & Saline	West End U	1-56	Aux Vases
1514	Dale C	Shell	Hamilton	Rural Hill U	6-59	Aux Vases & Ste. Genevieve
1507	Dale C	Stewart	Hamilton	B. Jones	8-58	Aux Vases
1504	Dale C	Texaco	Hamilton	W. Dale U	7-51	Aux Vases
1508	Dale C	Texaco	Hamilton	C. W. Hood	6-58	Aux Vases
1509	Dale C	Texaco	Hamilton	C. W. Hood	6-58	Benoist
2002	Divide E	Gulf	Jefferson	W. D. Holloway	5-55	McClosky
4003	Dubois C	H. Mabry	Washington	Peek	12-59	Cypress
3603	Eldorado C	H. V. Spires	Saline	Endicott U	4-59	Waltersburg
1007	Ellery E	Herndon	Edwards	Ellery E U	11-57	Aux Vases
1019	Ellery E	Herndon	Edwards	Ellery E U	11-57	Ohara
4209	Enfield	Ryan	White	S. Enfield U 2	9-56	McClosky
4292	Enfield	Ryan	White	S. Enfield U 3		Ohara
331	Flora S	General American	Clay	Given-McGrew U	10-59	McClosky
3953	Friendsville N	J. W. Sanders	Wabash	Friendsville N U	8-57	Bieh
4123	Goldengate C	Cities Service	Wayne	Goldengate U	8-56	Rosiclare & Ohara
4133	Goldengate C	Ill. Mid. Cont.*	Wayne			Rosiclare & McClosky
4138	Goldengate C	Skiles	Wayne	O'Daniel U	1-59	Benoist
3600	Harco	Phillips	Saline	Noble "A"	6-57	Aux Vases

(Continued)

Information	Production and injection statistics (thousand bbls)						Map no.
Sec.-Twp.-Range	Secondary recovery						
	Water injection		Oil production		Water production		
	Total 1959	Cumulative 12-31-59	Total 1959	Cumulative 12-31-59	Total 1959	Cumulative 12-31-59	
{ 1, 2, 12-1N-1W } 35, 36-2N-1W }	6,106	19,200	1,784.2	6,317	3,660	6,947	404
2-6N-10E	53	315*	0.7	16			1900
35-4N-9E	29*	311*	0.3	7†			3402
5, 8-3N-8E	143	793	7.1	69*	74	333	300
2, 10, 11-3N-9E	291	1,546	42.0	104*	92	591	3403
15-1S-8E	14*	162*	1.6	10†			4107
29-1N-8E	*	*		128†			4109
{ 25-1S-6E } { 19, 20, 28-33-1S-7E } 21-1S-7E	2,434	13,458	134.8	948	1,528	4,656	4110
16, 17-1N-7E	352	1,070*	22.9†	313†			4111 4119
8-3N-9E	*	*	*	*	*	*	3416
15, 21, 22, 28-2N-8E	318	1,168	93.8	343	31	65	302
{ 32, 33, 34-4N-9E } { 4, 5, 8, 9-3N-9E }	6,244	28,554	481.0	1,896	2,403	7,586	3404
{ 30, 31-3N-9E } { 25-3N-8E }	692	1,656	21.0	67	258	333	3405
11, 12-2N-8E	808	1,700	35.1	92	137	260	3406
{ 3-1N-7E } { 27, 34, 35-2N-7E }	1,680	7,490	259.2	1,406	1,040	2,239	4112
25, 26, 35, 36-2N-7E	1,054	3,797	367.6	719	343	411	4113
14, 15, 22, 23, 26, 27-1N-8E	909	9,984	47.9	452	457	2,956	4114
2, 11-1N-7E	1,154	1,973	206.3	260	55	69	4131
13, 14, 24-7N-10E	55	994*	15.6	166	27	181	1901
23, 26-7N-10E	241	2,611	65.4	450	83	634	1902
9-2S-8E	147	723	10.0	99	72	145	4115
16-2S-8E	531	3,115	48.9	391	273	1,176	4116
22-2N-8E	88	258	6.2	71	42	84	4117
{ 12, 13-1S-7E } { 7, 18-1S-8E }	712	1,255	41.8	73	56	99	4118
31, 32-1N-8E	83	83	5.0*	5*	3	3	4136
22-2N-8E	180*†	742*†	8.0*	81*	180*	742*	4108
1-5N-9E		0†		0†		0†	1908
12-5N-9E		1†		0†		0†	1909
28-6S-10E	53	53	4.3*	4*			4281
10-6S-10E	131	559	5.0	60			4208
21-6S-10E	110	806	4.7	29	33	110	4206
21-6S-10E	30	1,406	8.0	99	25	1,171*	4207
14, 15, 22, 23-3S-3W	1,249	11,058	191.1	2,618	1,479	9,026	4000
13-2S-6E	7	51	0	0	0	0	4120
{ 6-7S-5E } { 1-7S-4E }	53	53	0	0			1309
4, 5-7S-5E	319	319	15.3	15			1513
11-6S-5E	1,143	1,143	8.3*	8*	36*	36*	1510
11-6S-5E	190	190	*	*	*	*	1511
13, 23, 24-6S-5E	179	179	7.0*	7*	21	21	1512
5, 6, 7-7S-5E	287	1,248	18.6	144	254	652	1502
17, 19, 20-7S-5E	342	1,160	39.5	126	158	379	1503
7, 11, 12, 13, 14, 18, 23, 24-6S-5E	3,534	3,534	52.9	53	70	70	1514
8-6S-6E	59*	76*	8.6	9	1	1	1507
11-6S-6E	432	3,464	42.6	423	354	1,563*	1504
3-6S-6E	111	176	16.7*	20*	148*	159*	1508
3-6S-6E	113	170	*	*	*	*	1509
21-1S-4E	259	940	19.7	74*	194	473	2002
20-3S-1W	2	2	0	0	2	2	4003
2-8S-7E	38	38	0.4	0	1	1	3603
27, 34-2S-10E	248	504	72.7*	103*	193†*	193†*	1007
27, 34-2S-10E	340	638	*	*	*	*	1019
28, 29, 32-5S-8E	124	362	15.6	40*	133	167	4209
28, 29, 32-5S-8E	37	119	2.3	45*	37	37	4292
4-2N-6E	16	16	0.2	1	1	1	331
1-1N-13W	*	*	1.6	2	0	0	3953
28, 32, 33-2S-9E	188	525	13.2	43	27	53	4123
25-2S-9E							4133
26-2S-9E	35	35	0	0	0	0	4138
16-8S-5E	24	56	3.0	3	0	0	3600

TABLE 15.—

Map no.	Development as of 12-31-59						Injection water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source Sd=Sand Gr=Gravel Prod=Produced	Type F=Fresh B=Brine	Av. bbls per day per well per ft.	Max. well-head pressure reported PSI
	Inj.	Prod.			Sub-jected to inj.	Total				
404	129	113	5-Spot	20			Devonian & Prod	B	3.4	300
1900	3	3	Flank		40	80			6.0	
3402	1	1			20	40	Cypress	B	15.7	650
300	2	3	Peripheral	20	100	400	Cypress	B	39.3	
3403	2	6	Peripheral	20	400	400	Cypress	B	36.3	
4107	1	1	Line Drive	20	40	40	Prod	B	3.9	
4109	4	4	Irregular	10	180	180	Cypress & Prod	B		
4110	26	26	5-Spot	40	1,967	2,100	Penn. & Cypress Sd & Prod	B	18.3	945
4111										
4119	4	15	Perimeter		440	440	Penn. Sd & Prod	B	48.2	600
3416	*	*			*	*	Prod & Cypress	B		
302	8	13	Line Drive	50 & 80	380	560	Penn. Sd & Prod	B	7.3	1,000
3404	10	45	Line Drive	100	1,200	2,500	Cypress & Prod	B	17.1	30
3405	2	8	Line Drive	200	400	1,290	Tar Springs & Prod	B	189.6	
3406	4	12	Line Drive	85	240	240	Cypress & Prod	B	85.2	60
4112	34	39	5-Spot	18	687	1,400	Penn. & Prod	B	9.0	600
4113	22	19	5-Spot	20	380	1,094	Penn. & Prod	B	8.6	550
4114	17	19	Line Drive	113	1,870	2,320	Cypress & Prod	B	14.7	700
4131	20	21	5-Spot	28	560	1,273	Penn. & Prod	B	9.3	350
1901	2	3	Mod. Line	20	235	235	Well & Prod	F & B	12.5	1,150
1902	5	10	Mod. Line	20	415	415	Well & Prod	F & B	16.5	1,650
4115	5	6	Mod. Peripheral	10	172	172	Sewage & Prod	F & B	10.1	1,400
4116	7	11	Mod. Peripheral	10	243	243	Sewage & Prod	F & B	13.9	1,300
4117	2	3	5-Spot		20	40	Penn. Sd	B	10.0	1,000
4118	26	31	5-Spot	20	588	588	Penn. Sd	B	7.2	700
4136	2	3		10	50	50	Cypress & Prod	B	8.4	1,100
4108	2	2			60	60	Prod	B	16.4	
1908	1	2		40	40	30	Cypress	B		
1909	1	1		40	40	20	Cypress	B		
4281	2	3	Peripheral	10	50	60	Sd & Gr	F	3.2	550
4208	2	2	Irregular	10	40	40	Gr	F	11.9	600
4206	1	6		10	40	100	Sd & Prod	B	10.0	
4207	1	6	Irregular	20	65	120	Upper Sd & Prod	B	2.7	
4000	36	64	5-Spot	20	640	640	Prod & Penn. Sd	F & B	6.8	420
4120	1	1		40	80	80	Cypress Sd	B	6.3	†
1309	2	3			120	80	Cypress	B	9.6	
1513	12	15	5-Spot	20	350	260	Cypress	B	4.1	300
1510	25	24	5-Spot	20	450	450	Cypress	B	10.4	150
1511	6†	3	5-Spot	20	140	140	Cypress	B	12.6	105
1512	8	14	5-Spot	10	211	269	Cypress	B		
1502	3	6	5-Spot	10	50	110	Penn & Prod	B	17.5	1,060
1503	3	7	Irregular	10	65	90	Penn & Prod	B	20.8	1,060
1514	80	77	5-Spot	20	1,954	1,954	Cypress & Prod	B	4.9	116
1507	1	2		10	40	40	Cypress	B	7.3	1,150
1504	3	12	Perimeter	10	295	295	Sd & Prod	B	28.2	880
1508		8			100				11.7	†
1509		7		10	100				11.9	0
2002	1	5	Edge	20	20	150	Prod	B	101.4	580
4003	1	4		10	60	60	Tar Springs	B	5.6	0
3603	1	4	Line Dr.	10	140	140	Penn & Prod	B	19.8	1,300
1007	10	16			300	300	Purchased from Superior	F	4.5	1,580
1019	10	16			300	300	Purchased	F	13.3	1,370
4209	2	2	Line		155	155	Well	F	33.9	1,345
4292	1	2			80	80	McClosky, Ohara & Prod	R	20.0	800
331	1	1		40	60	60	Penn. Sd & Prod	B	15.2	
3953	1	2		10	40	80	Water Sd	F		
4123	6	11	Irregular		125	360	Gr	F	5.7	1,000
4133	1	3	Irregular	20			Cypress	B		
4138	2	2			40	40	Shallow Sd	F	5.1	0
3600	1	2		10	10	30	Prod	B	5.5	

(Continued)

Reservoir statistics (average values)						Remarks	Map no.
Depth feet	Net pay thickness feet	Porosity per cent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
C. 1,200 U.C. 10.0 U.C. 19.3 U.C. 74 L.C. 9.0 L.C. 21.1 L.C. 275 38.3						}	404
Ben. 1,350 Ben. 19.0 Ben 19.6 Ben. 186							
2,645	8.0			40.0	3.2 @ 75°F	*Injection shut down from 12-55 to 5-57; controlled dump flood.	1900
3,000	5.0			38.0		*Controlled dump flood. †Includes primary production from 7-54 to 12-57.	3402
3,010	5.0			36.4		*Cumulative production since 6-55.	300
2,950	11.0			30.0		*Includes 1956 primary production.	3403
3,159	10.0					*Dump flood. †Includes primary production since 4-55.	4107
3,050	5.0					*Dump flood. †Excluding 1959.	4109
3,200	14.0	5-22	80	39.0			4110
						*No data 1957-59.	4111
2,900	5.0	19.0		38.0		*Adjusted to 1958 value. †Estimated.	4119
						*Included with Ohio Parkersburg Unit 3409.	3416
2,500							302
2,639	15.0	18.0	65				3404
2,930	10.0			36.0			3405
2,975	5.0	13.0*	300*			*Estimated.	3406
2,984	6.5						4112
2,950	14.6	19.0	73	35.0		Previously subjected to gas injection.	4113
2,950	15.5	19.0	106	37.0		Previously subjected to gas injection.	4114
3,070	10.0	13.0	300	36.0			4131
2,930	17.0	19.0	106	40.0		Gas injection 7-55 to 1-58; no effect.	1901
2,530	6.2	14.0		39.8	3.7 @ 100°F	*Adjusted by operator.	
2,580	8.2	14.0		39.8	2.9 @ 92°F		1902
3,150	8.0	19.0	115	39.0	3.7 @ 100°F		4115
3,200	14.8	20.0	80	39.0	3.7 @ 100°F		4116
2,639	12.5	16.5	43	34.4	6.8 @ 60°F		4117
3,055	15.9	19.0	85	38.7	3.4 @ 90°F		4118
3,053	17.0						4176
3,050	15.0					*Estimated. †Dump flood.	4108
2,941	5.0					*No data 1959. †Excluding 1959.	1908
2,954	6.0					*No data 1959. †Excluding 1959.	1909
2,279	8.0				4.4	*Includes primary production since 9-59.	4281
2,950	15.0	20.0	218	35.1	5.0 @ 103°F		4208
2,960	30.0	15.0*	300*	37.0		*Estimated.	4206
2,960	30.0	15.0†	200†	37		*Corrected to 1958 value. †Estimated.	4207
1,230	14.0	20.0	250	37.0		*Shell, Mobil, McBride & Horton.	4000
3,316	4.0					*Abandoned 10-12-59. †Vacuum.	4120
3,200	18.0	23.0					1309
3,200	18.0	21.0					1513
3,100	21.0	19.1	96	37.0		*Includes 1511.	1510
3,200	12.0					*Included with 1510. †3 dual injection wells.	1511
3,108				38.0	4.3 @ 100°F	*Includes primary production since 5-59.	1512
3,200	15.0	18.0*	75*	37-39		*Estimated.	1502
3,150	15.0	18.0*	75*	35-38		*Estimated.	1503
3,120	A.V. 20.9			36.5			1514
3,195	L.O. 10.1						
	McCl. 12.4						
3,088	22.0					*Estimated.	1507
3,050	14.0	17.0	125	38.0		Previously subjected to gas injection.	1504
						*Adjusted by operator.	
3,050	26.0			37.0		*Includes 1509 oil and water production. †Vacuum.	1508
2,950	26.0			37.0		*Oil and water production included with 1508.	1509
2,805	6.9	18.0		36.6	3.4 @ 97°F	*Adjusted to 1957 value.	2002
1,231	12.0		40	37.0			4003
2,120	7.0	13.0	100				3603
3,160	15.0	17.0	33			*Includes 1019. †Since 1-1-59.	1007
3,220	7.0					*Included with 1007.	1019
3,385	4.6	10.5	22		2.5 @ 103°F	*Includes primary production since 1-1-57.	4209
2,874†	5.0			36.8	3.0 @ 102°F	*Subsea. †Includes primary production since start of flood.	4292
2,992	12.0						331
1,631	10.0			36.0	34.2 @ 63°F	*Dump flood, unknown.	3953
3,260	15.0	15.0	10-15	36.0			4123
3,200						*No data 1959.	4133
3,097	10.0						4138
2,890	12.0	22.0*	100*	39.0		*Estimated.	3600

TABLE 15.—

Map no.	General					
	Field C=Consolidated	Operator	County	Project U=Unit	Date first injection	Formation
3601	Harco E	Sun	Saline	Harco W.F.P. U	7-59	Cypress
3602	Harco E	Sun	Saline	Harco W.F.P. U	7-59	Aux Vases
4210	Herald C	C. E. Brehm	White	Herald W. U	1-55	Waltersburg
1405	Herald C	Calvert	Gallatin	Cottonwood N U	12-57	Cypress
4211	Herald C	Mabee-Allen	White	Ackerman U	2-56	Aux Vases
4212	Herald C	Q. B. Mitchell	White	Bayley U	9-57	Cypress
1105	Hill E	B and G	Effingham	Hill E. U	12-59	Cypress
1101	Hill E	Partlow & Cochonour*	Effingham	Cypress U	10-57	Cypress
332	Hord	Shirk & Webster	Clay	S. Hord U		Rosiclare
320	Ingraham	Humble	Clay	Ingraham U	12-56	Rosiclare
1406	Inman E C	Humble	Gallatin	Big Barn	4-54	U. Cypress
1407	Inman E C	Humble	Gallatin	Kerwin-Crawford	6-55	Clore, Palestine, Walters- burg, Tar Springs, Cy- press, Hardinsburg
1408	Inman E C	Humble	Gallatin	West U	7-56	Waltersburg, Cyypress. Hardinsburg
1409	Inman E C	Natural Resources	Gallatin	Big Barn	3-54	Tar Springs
1410	Inman E C	Natural Resources	Gallatin	Big Barn	3-54	Cypress
1411	Inman E C	Sun	Gallatin	Inman E*	3-54	Tar Springs
1400	Inman W C	T. A. Ferral*	Gallatin		7-58	Aux Vases
1401	Inman W C	V. R. Gallagher	Gallatin	Bradley U	10-57	Biehl
1402	Inman W C	Gulf	Gallatin	W. Inman U	5-55	Cypress
1403	Inman W C	Gulf	Gallatin	W. Inman U	3-57	Tar Springs
1404	Inman W C	Phillips*	Gallatin	Lever	5-57	Cypress
1415	Inman W C	Skiles	Gallatin	Inman W	4-56	Tar Springs
321	Iola C	Humble	Clay	Iola	6-58	Cypress, Paint Creek, Bethel, Aux Vases
322	Iola C	Texaco	Clay	Iola Coop.	6-58	Benoist
323	Iola C	Texaco	Clay	Iola Coop.	6-58	Aux Vases
303	Iola C	Tidewater	Clay	Iola Coop.	10-57	Bethel, Aux Vases
304	Iola C	Tidewater	Clay	Reed & Heirs	10-57	Bethel, Aux Vases
325	Iola C	Tidewater	Clay	L. Moss "A"	7-58	Bethel & Aux Vases
326	Iola C	Tidewater	Clay	M. J. Reed	6-58	Bethel & Aux Vases
4001	Irvington	L. Kapp*	Washington	Molting Field		Cypress
4002	Irvington	M. Mazzarino	Washington	Kasten U	11-57	Cypress
4004	Irvington	Mobil	Washington	C. Koelling	2-59	Benoist
203	Johnson N	W. H. Bass*	Clark	N. Johnson	1-53	Casey
204	Johnson N	F. A. Bridge*	Clark	Block "A"	4-49	Casey
205	Johnson N	F. A. Bridge*	Clark	Block "B"	5-51	Casey
206	Johnson N	O. A. Oldfield*	Clark	V. Jones	9-51	Casey
207	Johnson N	Pure	Clark	N. Johnson	11-56	Claypool, Casey & U. Partlow
208	Johnson N	Tidewater	Clark	Clark County 1	2-50	Casey
209	Johnson S	Forest	Clark	S. Johnson	3-49	U. Partlow
210	Johnson S	Pure	Clark	Johnson Ext. 1	1-54	U. Partlow
211	Johnson S	Pure	Clark	Johnson Ext. 2	11-55	Claypool, Casey & U. Partlow
212	Johnson S	Pure	Clark	Pure-Kewanee	1-54	U. Partlow
213	Johnson S	Pure	Clark	Weaver-Bennett	1-53	U. Partlow
4134	Johnsonville C	Pure	Wayne	Crisp U	2-58	Aux Vases
4121	Johnsonville C	Texaco	Wayne	Johnsonville U	10-56	Aux Vases
4122	Johnsonville C	Texaco	Wayne	Johnsonville U	11-54	McClosky
4135	Johnsonville C	Texaco	Wayne	Johnsonville U	2-58	Ohara
1412	Junction	M. Youngblood*	Gallatin	Junction U	5-51	Waltersburg
3915	Keensburg S	White & Vickery*	Wabash	A. P. Garst	10-54	Cypress
4125	Keenville	Calvert	Wayne	Keenville U	11-56	McClosky
4126	Keenville	W. Duncan	Wayne	Keenville U	4-54	Aux Vases
305	Kenner	Texaco	Clay	Kenner U	11-57	Benoist
330	Kenner	Texaco	Clay	Kenner U*	6-59	Aux Vases
324	Kenner N	Indiana Farm Bureau	Clay	Theobald	10-58	Benoist
306	Kenner W	Phillips	Clay	W. Kenner U	2-52	Benoist & Cypress
3954	Lancaster	Hayes-Wolf Bros.	Wabash	Lancaster U*	12-58	Bethel
3916	Lancaster S	Ashland	Wabash	Lancaster S	1-55	Bethel
2201	Lawrence	Baldwin & Baldwin*	Lawrence	Cummins Farm	10-57	Bridgeport & Paint Creek
2202	Lawrence	Bradley	Lawrence	C. M. Perkins	2-55	Bridgeport
2203	Lawrence	Bradley	Lawrence	C. M. Perkins	2-55	Kirkwood

(Continued)

Information	Production and injection statistics (thousand bbls)						Map no.
Sec.-Twp.-Range	Secondary recovery						
	Water injection		Oil production		Water production		
	Total 1959	Cumulative 12-31-59	Total 1959	Cumulative 12-31-59	Total 1959	Cumulative 12-31-59	
25-8S-5E	26	26	1.2	1	14	14	3601
24, 25, 26-8S-5E	2	2	0.9	1	6	6	3602
28, 33, 34-6S-9E	66	192	29.7	62			4210
21, 28-7S-9E	605	1,367	112.1	159*	80	150	1405
4-7S-10E	13	109	10.4	23*			4211
2-7S-9E	110	246	6.6	8	2	3	4212
11, 12, 13, 14-6N-6E	43	43	0	0	9	9	1105
12-6N-6E		213†		0†		213†	1101
26, 27, 34, 35-5N-6E	882	1,200	97.5	99	179	190	332
4, 9-4N-8E	808	2,273	24.7	253*	568	1,300	320
11-8S-10E	14	108	3.3	71*	3	8	1406
11, 14-8S-10E	1,448	5,178	456.0	1,114*	423	777	1407
15-8S-10E	1,279	4,328	643.2	1,560*	256	501	1408
{ 34-7S-10E 2, 3, 4, 10, 11-8S-10E }	2,298	12,710	55.1*	832*	483	1,198	1409
{ 34-7S-10E 2, 3, 4, 10, 11-8S-10E }	481	2,948	104.0*	987*	316	658	1410
3-8S-10E	238	1,349	6.2	185	133	465	1411
19-8S-10E							1400
17-8S-9E	79	172	34.0	76*	14	23	1401
15, 16-8S-9E	174	1,487	54.3	309*	63	161	1402
15, 16-8S-9E	141	285	0	0	0	0	1403
3-8S-9E	1	8	0	0	0	0	1404
13, 24-8S-9E	*	*	3.0	5	23	46†	1415
15-5N-5E	53	84	32.6	36	24	31	321
14, 15-5N-5E	233	358	8.1	9	*	*	322
14, 15-5N-5E	611	1,478	38.8	45	386*	971*	323
14, 15-5N-5E	920*	1,655*	336.3*	457*	503*	691*	303
14, 15-5N-5E	*	*	*	*	*	*	304
14-5N-5E	*	*	*	*	*	*	325
14-5N-5E	*	*	*	*	*	*	326
9-1S-1W		134†		12†		96†	4001
9-1S-1W	37	70	10.3	19	41	41*	4002
15-1S-1W	25	25	7.0*	7*	29	29	4004
2, 11-9N-14W				34†			203
2-9N-14W				246†			204
35, 36-10N-14W				59†			205
1, 3-9N-14W							206
10, 11, 15-9N-14W	1,479	3,862	198.2	240	973	1,599*	207
2-9N-14W	142	2,418	7.1	160	203	1,572	208
27, 34, 35-9N-14W	3,539	34,618	83.9	1,082			209
23, 26, 27-9N-14W	1,027	9,027	38.1	547	1,076	6,634	210
22, 23, 26-9N-14W	734	4,756	66.0	261	597	1,551	211
22, 27-9N-14W	386	2,800	8.0	140	394	2,000	212
27-9N-14W	466	7,722	13.5	469	704	6,343	213
7, 8, 17, 18-1S-6E	1,049	1,923	382.1*	397*	31	38	4134
{ 3, 4-1S-6E 21, 26, 27, 28, 33, 34, 35-1N-6E }	1,226	3,941	305.1	457	904	1,123	4121
21, 26, 27, 28, 33, 34, 35-1N-6E	4,439*	17,988*	623.4*	1,717*	1,838	7,149†	4122
28-1N-6E	*	*	*	*	*	*	4135
16-9S-9E	111	1,399	10.6	249†	108	654	1412
27-2S-13W				19†			3915
27, 28, 33, 34-1S-5E	353	928	71.1	169*	274	589	4125
28, 29-1S-5E	217	1,815	13.2	334*	104	567	4126
{ 25, 36-3N-5E 19, 30, 31-3N-6E }	992	2,336	144.0	317	544	883*	305
{ 30, 31-3N-6E 25, 36-3N-5E }	108	108	0	0	0	0	330
17-3N-6E	2	7	0	0	14	*	324
23-3N-5E	1,513	10,283	30.4	344	605	1,923	306
4, 9-1N-13W	117	130	9.8†	10†			3954
21-1N-13W	26	124	8.1	43*			3916
6-3N-12W							2201
32-4N-12W	619	2,334	89.3*	501*	391*	1,122*	2202
32-4N-12W	715	2,132	*	*	*	*	2203

TABLE 15.—

Map no.	Development as of 12-31-59						Injection water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source Sd=Sand Gr=Gravel Prod=Produced	Type F=Fresh B=Brine	Av. bbls per day per well per ft.	Max. well- head pressure reported PSI
	Inj.	Prod.			Sub- jected to inj.	Total				
3601	1	2			30	30	Penn Sd	B	15.8	1,120
3602	2	9			40	120	Penn.	B	0.6	
4210	7	21			365	320	Penn.	B	4.5	
1405	21	20	5-Spot	10	400	525	Basal Penn. Sd	B	6.6	1,600
4211	1	2			30	40	Cypress	B	1.5	500
4212	2	4		10	20	40	Palestine	B	10.0	1,950
1105	3	15	Flank		151	151	Shallow Gr & Prod	F & B	39.5	0
1101	1	2			10	120	Prod	B		
332	3	12	Flank	20	333	333	River & Prod	F & B	89.5	1,000
320	9	10	5-Spot	40	297	552	Penn. Sd	B	49.2	175
1406	2	1	5-Spot	20	15	30	River	F	3.2	1,240
1407	38	36	5-Spot	20	401	435	Gr Bed	F	9.1	1,100
1408	38	39	5-Spot	20	631	884	Gr	F	11.5	835
1409	34	50	Mod. 5-Spot	20	750	796	Gr Bed	F	12.3	1,240
1410	24	50	Mod. 5-Spot	20	664	664	Gr Bed	F	5.5	1,235
1411	2	2	5-Spot	10	40	40	Shallow Gr	F	11.2	1,240
1400										
1401	3	3	Peripheral	10	180	180	1250 <sup>1</sup> Water Sd	B		875
1402	10	7	5-Spot	20	110	170	Penn. Sd	B	3.0	1,545
1403	10	7	5-Spot	20	90	100	Penn. Sd	B	3.5	1,450
1404	1	1		10	10	20	Prod	B	0.7	
1415	1	8	Line		15	90	Waltersburg	B		
321	1	2	5-Spot	20	25	30	Penn. & Prod	B	7.0	680
322	9	4	5-Spot	10	190	310	Shallow Sd & Prod	B	7.1	590
323	11	11	5-Spot	10	240	310	Shallow Sd & Prod	B	11.7	655
303	12	14	5-Spot	20	213	280	Penn. Sd & Prod	F & B	5.0	720
304	5	5	5-Spot	20	73	120	Penn. Sd & Prod	F & B	*	*
325	2	4	5-Spot	20	50	60	Penn. Sd & Prod	F & B	*	*
326	1	1	5-Spot	20	8	30	Penn. Sd & Prod	F & B	*	*
4001	4	11		10	160		Tar Springs	B		
4002	1	5			80	80	Prod	B	5.1	200
4004	1	7	Irregular	10	40	110	Tar Springs	B		
203			5-Spot	4.5						
204										
205										
206										
207	48	59	5-Spot	4.5	223	223	Prod & Gr	F & B	1.5	160
208	16	51	5-Spot	4.4	81	252	Bridge Plant & Prod	F & B	0.9	
209	86	75	5-Spot	4.4	400		Prod	B	2.3	325
210	66	54	5-Spot	5	243	646	Gr & Prod	F & B	1.2	245
211	73	60	5-Spot	5	236	646	Gr & Prod	F & B	0.4	245
212	20	12	5-Spot	4.4	53	646	Prod	B	1.6	245
213	36	22	5-Spot	4.4	114	646	Prod	B	1.0	245
4134	10	8	5-Spot	36	360	600	Penn. & Prod	B	16.9	700
4121	32	29	5-Spot	10	2,110		Penn. Sd & Prod	B	13.1	425
4122	32	81	Perimeter	20	3,220		Weiler & Prod	B	38.0	200
4135	3	2	Random		40	40	Weiler & Prod	B		
1412	11	7	Irregular 5-Spot	10	263	263	Shallow Sd	F	2.0	1,000
3915	1	1		60	60	60				
4125	3	9	Peripheral		220	220	Basal Penn. Sd	B	35.8	
4126	4	4	Peripheral		120	120	Shallow Sd	F	11.4	
305	23	25	5-Spot	10	480	715	Penn. & Prod	B	8.4	1,410
330	4		5-Spot	10	40	40	Penn. & Prod	B	6.8	543
324	1	2			20	80	Prod	B		450
306	12	15	5-Spot	10	270	329	Penn. Sd & Prod	B	13.3	1,190
3954	5	52		30	50	500	McClosky	B	4.0	1,400
3916	1	3	Irregular	30	30	30	L. Tar Springs	B	7.0	1,000
2201										
2202	19	10	5-Spot	10	100	100	Buchanan Sd & Prod	B	6.4	600
2203	19	10	5-Spot	10	100	100	Buchanan Sd & Prod	B	5.2	600

## WATERFLOOD OPERATIONS

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(Continued)

Reservoir statistics (average values)						Remarks	Map no.
Depth feet	Net pay thickness feet	Porosity per cent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
2,550	9.0						3601
2,850	8.0						3602
1,866*	20.0	19.5	200	38.0	3.5 @ 60°F		4210
2,650	12.0	15.0	17			*Includes primary production since 12-57.	1405
2,890	23.0				3.4	*Includes primary production since 1-57.	4211
2,715	15.0	15	58	39			4212
2,460	13.0	18.5	100	36.6	3.7 @ 91°F		1105
2,460	12.0			38.0		*No data 1959. †Excluding 1959.	1101
2,790	8.6	15.0	862	36.1	5.9 @ 80°F		332
3,000	5.1	14.2	2,450			*Corrected to 1957 value.	320
2,400	5.9	16.5	58	36.4	4.2 @ 92°F	*Corrected to 1958 value.	1406
1,670	11.3	19.6	959			*Corrected to 1958 value.	1407
2,000	7.8	18.1	57				1408
2,100	15.0	17.5	137	37.7	3.6 @ 63°F	*Prod. from Big Barn and MBK unit.	1409
2,400	9.6	16.8	50	38.0	3.6 @ 63°F	*Prod. from Big Barn & MBK unit.	1410
2,100	29.0	17.9	133	35.5		*Coop. with Calstar.	1411
						*No data 1958-59.	1400
1,726		15.0	72	36.9	4.0 @ 80°F	*Adjusted to 1958 value.	1401
2,500	16.5	13.5	40	38.6	3.9 @ 100°F	*Corrected to 1958 value.	1402
2,180	11.0	13.0		36.1			1403
2,560	6.0	18.0†	100†	35.0		*Abd. 6-59. †Estimated.	1404
2,122	8.0					*Dump flood. †Since 1-1-58.	1415
2,150	21.0	15.7	42-100	36.0			321
2,290	9.5	15.8	48	35.2-37.0		*Water production comingled with 323.	322
2,350	13.3	15.7	80	35.2-37.0		*Includes water production from 322.	323
2,280		16	50			*Includes 304, 325 and 326.	303
2,330	41.4	16	80				
2,300	45.0			37.0		*Included with 303.	304
2,300	30.0					*Included with 303.	325
2,300	44.0					*Included with 303.	326
1,374	12.0			36.0		*No data 1959. †Excluding 1959.	4001
1,400	20.0			38.0		*As of 1-59.	4002
1,531				37.2	3.5	*Includes primary production since 2-59.	4004
400	22.0	19.0	225	33.0	13.6	*No data 1957-59. †As of 12-56.	203
					19.0	Previously subjected to gas injection. *No. 1957-59 data.	204
						†As of 12-56.	
320	24.0, 19.0, 19.5		330			*No data 1958-59. †As of 4-57.	205
595	14.0					*No data 1957-59.	206
425	26.1	20.6	415	33.9	10.7 @ 70°F		207
490	48.0	16.6	319	29.2	14.7 @ 77°F	Subject to gas injection 1946-47.	208
465	35.0	18.9	312	29.7	21.0 @ 65°F	Previously subjected to gas injection.	209
							210
420	19.0, 15.0, 20.6		294				211
	30.0						
507	33.0	18.2	277	29.7	25.5 @ 65°F	Previously subjected to air injection.	212
467	35.5	18.6	285	29.7	25.5 @ 65°F		213
3,019	17.0	19.0	80	40			
3,000	7.5	19.1	187	35.0-39.0		*Includes primary production.	4134
3,100	10.0	15.5	850	35.0-39.0			4121
	5.0					*Includes 4135. †Corrected to 1958 value.	4122
1,750	14.0	13.4	22	34.7	6.7 @ 81°F	*Injection and production data included with 4122.	4135
						*Formerly Lewis Eng. †Includes primary production since 11-51.	1412
2,403	15.0	20.6	134	37.5	4.6 @ 91°F	*No data 1959. †Excluding 1957 and 1959.	3915
3,100	9.0					*Includes primary production since 11-56. Adjusted to 1958 value.	4125
2,950	13.0	20.0	155	39.0	3.5 @ 97°F	*Includes primary production since 4-54.	4126
2,700	14.0	15.6	54	35.0-37.0		*Corrected to 1958 value.	305
2,800	21.0	17.0		35.0-37.8		*Pilot flood.	330
2,750				36.0		*Unknown.	324
2,600	26.0	18.0	125	38.0			306
2,500	16.0			34.0		*Pilot flood. †Estimated.	3954
2,520	10.0					*Includes primary production since 1-55.	3916
						*No data 1957-59.	2201
900	14.0	18.0	125	36.0	6.1 @ 60°F	*Includes 2203.	2202
1,350	20.0	18.0	100	37.2	4.8 @ 77°F	*Included with 2202.	2203

TABLE 15.—

Map no.	General					
	Field C=Consolidated	Operator	County	Project U=Unit	Date first injection	Formation
2233	Lawrence	Bradley	Lawrence	Pepple	6-57	Kirkwood
2234	Lawrence	Bradley	Lawrence	L. Gillespie	11-58	Paint Creek
2235	Lawrence	Bradley	Lawrence	L. Gillespie	11-58	Cypress
2236	Lawrence	Bradley	Lawrence	L. Gillespie	11-58	Bridgeport
2241	Lawrence	Bradley	Lawrence	Fyffe	7-59	Cypress
2242	Lawrence	Bradley	Lawrence	O'Donnell	4-59	Cypress
2237	Lawrence	M. G. Curts*	Lawrence	Stoltz Heirs	7-58	Cypress
2206	Lawrence	T. W. George	Lawrence	Klondike	6-52	Bethel
2243	Lawrence	Gulf	Lawrence	Bell U	6-59	Cypress
2244	Lawrence	Gulf	Lawrence	Bridgeport U	6-59	Cypress
2240	Lawrence	D. S. Huddleston*	Lawrence	Vandermark-Albrecht U	8-58	Bridgeport
2208	Lawrence	W. C. McBride	Lawrence	Crump "40"	4-56	Kirkwood
2209	Lawrence	W. C. McBride	Lawrence	Crump U 1*	12-56	Kirkwood
2210	Lawrence	W. C. McBride	Lawrence	Neal	6-56	Paint Creek & Kirkwood
2249	Lawrence	W. C. McBride	Lawrence	Hinkle	8-59	McClosky
2251	Lawrence	W. C. McBride	Lawrence	Combs	3-59	Kirkwood & Benoist
2252	Lawrence	W. C. McBride	Lawrence	Bower-Ross	8-58	Kirkwood
2253	Lawrence	W. C. McBride	Lawrence	Fyffe (39)*	12-56	Kirkwood
2254	Lawrence	W. C. McBride	Lawrence	Dalrymple	9-59	Kirkwood, Paint Creek & Benoist
2211	Lawrence	Murphy	Lawrence	Stoltz	1-55	Bridgeport
2212	Lawrence	Murphy	Lawrence	Stoltz	1-55	Kirkwood
2213	Lawrence	Ohio	Lawrence	9 Projects*	1952	Kirkwood & Paint Creek
2214	Lawrence	Ohio	Lawrence	7 Projects*	1948	Bridgeport
2216	Lawrence	Ohio	Lawrence	4 Projects*	11-56	McClosky
2204	Lawrence	G. C. Schoonmaker	Lawrence	Applegate	9-52	Cypress & Jackson
2217	Lawrence	Shakespeare	Lawrence	S. Bridgeport U	10-56	Benoist
2207	Lawrence	Tekoil*	Lawrence	Gray Area	5-53	Jackson, Benoist & Renault
2250	Lawrence W	Houchins	Lawrence	S. Summer U	12-59	Benoist
704	Lillyville	Indiana Farm Bureau	Cumberland	Krogman	5-57	McClosky
2501	Livingston	Cahill & Smith	Madison	C & O Henke U	5-52	Penn.
2502	Livingston	W. H. Krohn*	Madison	Kroeger	5-59	Penn.
1201	Louden	W. L. Belden	Fayette	Hinton U	9-56	Cypress
1202	Louden	W. L. Belden*	Fayette	Unit 25	10-57	Cypress
1203	Louden	D. L. Burtschi	Fayette	D. L. Burtschi	10-53	Cypress
1205	Louden	Doran	Fayette	Stewart & Dial	7-57	Cypress
1200	Louden	W. H. Fishburn*	Fayette	Rhodes & McCloy	1-54	Paint Creek & Bethel
1206	Louden	General American	Fayette	Devore Coop.	7-57	Weiler
1225	Louden	L. B. Hoss	Fayette	Unit	2-59	Cypress
1204	Louden	Humble	Fayette	Louden	10-50	Weiler, Paint Creek, Bethel & Aux Vases
1207	Louden	Jarvis Bros. & Marcell	Fayette	Homan	3-54	Cypress
1208	Louden	Jarvis & Marcell	Fayette	Yakey	11-57	Cypress & Benoist
1209	Louden	B. Kidd	Fayette	B. F. Owens	9-54	Weiler
1210	Louden	Kingwood	Fayette	Yolton	8-57	Cypress
1211	Louden	Kingwood	Fayette	Yolton	8-57	Paint Creek
1213	Louden	J. J. Lynn Estate	Fayette	E. C. Smith	7-57	Cypress
1214	Louden	Mabee	Fayette	Homan	8-55	Cypress
1215	Louden	Mabee	Fayette	Koberlien	5-57	Cypress
1217	Louden	W. C. McBride	Fayette	Stokes-Weiler	3-56	Weiler
1216	Louden	Mobil	Fayette	Rhodes-Watson	8-57	Cypress, Paint Creek & Benoist
1224	Louden	Mobil	Fayette	Louden	4-58	Cypress, Paint Creek & Benoist
1218	Louden	Shell	Fayette	N. Loudon U	11-56	Cypress
1219	Louden	Shell	Fayette	S. Loudon U	3-55	Cypress
1220	Louden	R. H. Troop	Fayette	Durbin & Force Area	10-56	Cypress
1221	Louden	R. H. Troop	Fayette	Hiatt U	9-56	Cypress
1212	Louden	F. E. Wood	Fayette	Louden Ext.	12-55	Cypress
602	Main C	Ashland	Crawford	Birds 1	5-54	Robinson
603	Main C	Ashland	Crawford	Birds 2	3-57	Robinson
604	Main C	Bell Bros.	Crawford	Barrick	10-54	Robinson
605	Main C	M. F. Roberts	Crawford	Bishop	11-53	Robinson
610	Main C	E. Constantin*	Crawford	Smith	3-54	Robinson

## WATERFLOOD OPERATIONS

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(Continued)

Information	Production and injection statistics (thousand bbls)						Map no.
Sec.-Twp.-Range	Secondary recovery						
	Water injection		Oil production		Water production		
	Total 1959	Cumulative 12-31-59	Total 1959	Cumulative 12-31-59	Total 1959	Cumulative 12-31-59	
30-4N-12W	728	1,426	157.6	303	206	238	2233
26, 35-3N-12W	102	110	*	*	*	*	2234
26, 35-3N-12W	576	605	92.1*	98*	160*	166*	2235
26, 35-3N-12W	315	339	*	*	*	*	2236
6-3N-12W	207	207	4.5	5			2241
17-3N-12W	117	117	2.3	2			2242
25-4N-13W		30†		0†		0†	2237
25, 26, 35, 36-5N-13W	1,386	8,599	103.3	1,013	603		2206
1-3N-13W	214	214	2.9	3	7	7	2243
6-3N-12W	368	368	2.5	3	6	6	2244
34-3N-12W	141	175	0	0			2240
19-4N-12W	218	593	44.3	192	242	503*	2208
31-4N-12W	179	291	32.2	34	39	44	2209
29-4N-12W	601	1,159*	153.6	260	144	215	2210
27-3N-12W	5	5	0	0	8	8	2249
20-4N-12W	33	33	1.4	1	9	9	2251
29-4N-12W	122	142	8.5	9	21	23	2252
31-4N-12W	177	507	62.9	117	63	91	2253
29-4N-12W	101	101	22.4	22	15	15	2254
32-4N-12W	371*	1,349	67.8†	426†	408†	1,295†	2211
32-4N-12W	1,090	2,303*	†	†	†	†	2212
3-4N-12, 13W	9,861	38,663	2,075.9	7,357	3,912	11,008	2213
	8,057	62,349	781.5	7,914	7,339	36,910	2214
	2,317	4,878	218.8	454	1,253	2,033	2216
7-4N-12W		843*		22*			2204
20, 29, 30-3N-12W	724	1,499	108.7	200	238	289	2217
13-4N-13W	751	2,282	161.4	368*	336	1,003†	2207
14, 23, 24-3N-13W	8	8	0	0	0	0	2250
31-9N-7E	49	143	7.8	11	4*		704
17, 20-6N-6W	104	589*	27.4*	259*†	36*		2501
17-6N-6W	7	7	0	0	1	1	2502
32-7N-3E	5	93	3.4	9	1		1201
24, 25-8N-3E		455†		1†		1†	1202
18-7N-3E	27	54	6.1	12			1203
6-7N-3E	68	177	2.1	4	0	0	1205
26, 27, 34-8N-3E	309	2,053	45.8	468††	235	809†	1200
1-7N-2E	42	109	27.9	64*o	14	26	1206
31-8N-3E	95	95	18.8	19	5	5	1225
7, 8N-3E	31,203	200,959	8,910.1	51,907	8,935	33,347	1204
29, 32-7N-3E	1,695	3,149	391.3	1,184*	780	1,530*	1207
6-7N-3E	284	680	31.8	59*	161	242	1208
8-7N-3E	63	342	13.9	76	70	307	1209
{ 12-7N-2E }	165	404	39.8	76*	35	66	1210
{ 7-7N-3E }							
{ 7-7N-3E }	53	123	1.6	3*	5	13	1211
{ 12-7N-2E }							
20-7N-3E	209	459	157.5	287	97	125	1213
29-7N-3E	316	940†	77.0	367*†			1214
30-7N-3E	226	463	102.9	210			1215
14-8N-3E	153	748	92.3	186	11	14	1217
27, 33, 34-8N-3E	329	422	205.0	299*	103	603	1216
{ 32-8N-3E }	1,724	2,685	60.0	69*	11	27	1224
{ 5-7N-3E }							
20, 21-7N-3E	1,821	5,571	188.5	1,157	1,339	2,504	1218
21, 28, 29-7N-3E	1,314	6,083	208.4	1,412*	1,052	3,131	1219
24, 26-8N-3E	74*	243*	43.9	101†			1220
29-7N-3E	144	563	99.3	292	127	232	1221
{ 2, 3-7N-3E }	3,818	12,002	278.2	2,668*	3,123	6,683	1212
{ 34, 35, 36-8N-3E }							
9, 10, 15, 16-5N-11W	2,010	14,541	60.2	415		1,330*	602
20-5N-11W	133	391	11.3	19*			603
13-7N-13W	194	542	29.6	35			604
20-8N-12W	108*	2,208*	9.9*	35*			605
{ 12-7N-13W }							610
{ 7-7N-12W }							



(Continued)

Reservoir statistics (average values)						Remarks	Map no.
Depth feet	Net pay thickness feet	Porosity per cent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
1,400	30.0	18.0	75	37.0	5.8 @ 60°F		2233
1,660	10.0	16.5	25			*Included with 2235.	2234
1,550	28.0	17.0	35		4.6 @ 80°F	*Includes 2234 and 2236.	2235
990	30.0	19.3	200	29.8	20.8 @ 72°F	*Included with 2235.	2236
1,580	35.0	19.0	100				2241
1,500	28.0	16.7	15	38.0	43.0 @ 79°F		2242
1,540	20.0			36.0		*No data 1959. †Excluding 1959.	2237
1,620	18.0	17.2	60	37.8	5.2 @ 80°F		2206
1,650	20.0	18.0	80	28.0			2243
1,575	25.0	18.0	80	28.0			2244
988	24.0	20.7	398	29.5	21.0 @ 70°F	*Carried as 2241 in 1958 summary.	2240
1,280	25.0	20.0	90			*Since 1-1-57.	2208
1,420	22.0	20.0	80			*Was part of Crump-Fyffe; 1958 summary.	2209
1,390	33.0	20.0	60			*Corrected cumulative; includes only those wells on Neal lease.	2210
1,750	15.0	20.0	1,500				2249
1,450	20.0	16.0	40				2251
1,320	20.0	19.0	120				2252
1,420	20.0	20.0	80			*Was part of Crump-Fyffe Project.	2253
1,600	30.0	18.0	75				2254
860	25.0	22.3	148	37.0		*Adjusted to 1957 value. †Includes 2212, adjusted by operator.	2211
1,400	18.5	17.3	17	37.0		*Adjusted by operator. †Included with 2211.	2212
						*Westall-Boyd-Sutton-Middagh-Kimmel-More-Thorn-Leighty-King; formerly carried as 2213, 2219-23, 2239, 2215.	2213
						*Robins-Johnson-Lewis-Clark-Cooper-Gee-Finley; formerly carried as 2214, 2224-28, 2238.	2214
1,700						*Applegate, Williams, Gillespie, Vandermark.	2216
1,800	12.1	17.1	60	38.0	4.3 @ 81°F	*No data 1958-59.	2204
1,428	10.0	18.4	95	38.0	6.0 @ 84°F		2217
1,611	14.5	14.6	13		5.0 @ 85°F	*Includes primary production since 5-53. †Adjusted by operator.	2207
1,632	15.0	18.5	17				
2,040	9.2	17.2	36	35.0	4.8 @ 85°F		2250
2,450				35.0		*Estimated.	704
550	15.0	16.0		37.0		*Estimated. †Excluding 1958.	2501
520	15.0					*Previous flood 2500. Abd. 1958.	2502
1,584	20.0	17.4	126	34.0			1201
1,530	15.0			34.0		*No data 1959. †Excluding 1959.	1202
1,492	30.0					Previously subjected to gas injection. *Purchased from Humble.	1203
1,522	20.0	19.0	120	32.4			1205
1,570	25.0			39.0		Previously subjected to gas injection. *Formerly J. P. Babcock. †Includes primary production since 1-54.	1200
						†Corrected to 1958 value.	
1,454	10.0	18.0	43	38.7	5.2 @ 80°F	*Includes primary production since 7-57; †Corrected by operator. †Vacuum.	1206
1,484	60.0	22.0		37.0			1225
1,500	30.0	20.0	105	38.0	2.6 @ 79°F		1204
1,560	35.0	18.0	200	36.0		*Since 1-56.	1207
	20.0	19.0				Previously subjected to gas injection. *Includes primary production since 11-57.	1208
1,450	30.0			38.0		*Purchased from Humble.	1209
1,504	30.0					*Includes primary production since 8-57.	1210
1,572	29.0					*Includes primary production since 8-57.	1211
1,540	20.0	21.1	150	37.6	5.8 @ 79°F	*Purchased from Humble.	1213
1,537	40.0			36.0		*Includes primary since 1-56. †Operator adjusted figure.	1214
1,544	30.0			36.0		†Purchased from Shell Oil Co.	1215
1,480	25.0	19.4	93			*Purchased from Humble.	1217
1,500				37.0	4.0	*Includes primary production since 5-57.	1216
1,560							
1,580							
1,450				37.0	4.0	*Adjusted to 1958 data.	1224
1,525							
1,550							
1,550	21.0	21.0	180	36.8	4.7 @ 60°F		1218
1,550	18.4	20.4	164	36.8	4.7 @ 60°F	*Corrected to 1958 figure.	1219
1,493	30.0			34.6		*Only 1/2 of reported injection; injection wells are line wells.	1220
						†Since 1-57. †Line wells.	
1,536	40.0	19.0*	250*	34.6		*Estimated.	1221
1,550	16.0	20.0	200	38.0	5.0 @ 60°F	*Includes primary production since 12-55.	1212
950	30.0	21.0	136	31.0	15.0 @ 75°F	*Excluding 1959.	602
930	25.0	21.0	125	30.8		Previously subjected to gas injection. *Includes primary production since 3-57.	603
960	56.0	19.2	126	33.0		Previously subjected to gas injection.	604
1,000	22.4	22.1	156	35.7	10.0 @ 78°F	*Estimated.	605
						Previously subjected to gas injection. *No data 1957-59.	610

TABLE 15.—

Map no.	General					
	Field C=Consolidated	Operator	County	Project U=Unit	Date first injection	Formation
608	Main C	W. Duncan*	Crawford	Tohill-Hughes-Robinson		Robinson
606	Main C	Forest	Crawford	Oblong-Flood 2	10-53	Robinson
611	Main C	Forest	Crawford	Oblong-Flood 1	8-56	Robinson
669	Main C	Forest	Crawford	Oblong-Flood 3	1958	Robinson
670	Main C	Forest	Crawford	Stifle U	1958	Robinson
612	Main C	D. W. Franchot	Crawford	Birds*	6-51	Robinson
615	Main C	G. M. J.	Crawford	Porterville	4-54	Robinson
616	Main C	Hardinville*	Crawford	Tohill & Hughes	6-51	Robinson
685	Main C	Indiana Farm Bureau	Crawford	Dennis Heirs U	10-59	Robinson
618	Main C	G. Jackson*	Crawford	Stanford	6-52	Robinson
617	Main C	Kewanee	Crawford	Wright	1-53	Robinson
619	Main C	Logan	Crawford	Alexander-Reynolds	12-51	Robinson
671	Main C	MacDonnell	Crawford	Kirkland U	1-58	Robinson
672	Main C	MacDonnell*	Crawford	Kirkland Area		Robinson
620	Main C	Mahutska	Crawford	Oil Center	5-54	Robinson
621	Main C	Mahutska	Crawford	Eaton	5-57	Robinson
622	Main C	Mahutska	Crawford	C.T.L.		Robinson
623	Main C	Ohio	Crawford	25 Projects*	1948	Robinson
624	Main C	Partlow & Cochonour*	Crawford	Rich U	10-54	Robinson
626	Main C	E. C. Reeves	Crawford	Billingsley	12-53	Robinson
609	Main C	E. Constantin*	Crawford	J. S. Kirk	8-51	Robinson
629	Main C	Tidewater	Crawford	Clark-Hulse	1-52	Robinson
630	Main C	Tidewater	Crawford	Birch 1	8-54	Robinson
631	Main C	Tidewater	Crawford & Lawrence	Birds Area	2-52	Robinson
632	Main C	Tidewater	Crawford	Barrick-Walters*	3-54	Robinson
633	Main C	Tidewater	Crawford	Good-Haws	9-57	Robinson
634	Main C	Tidewater	Crawford	Howard	2-52	Robinson
635	Main C	Tidewater	Crawford	Ames	9-57	Robinson
636	Main C	Tidewater	Crawford	Dennis-Hardin	8-50	Robinson
637	Main C	Tidewater	Crawford	Thompson	9-52	Robinson
638	Main C	Tidewater	Crawford	Henry-Ikemire	2-48	Robinson
639	Main C	Tidewater	Crawford	Lefever-Musgrave	2-54	Robinson
640	Main C	Tidewater	Crawford	Montgomery-Seitzinger	5-54	Robinson
641	Main C	Tidewater	Crawford	Stifle-Drake	6-52	Robinson
642	Main C	Tidewater	Crawford	Walters-Stahl	11-54	Robinson
644	Main C	Tidewater	Crawford	H. J. Musgrave*	10-53	Robinson
668	Main C	Tidewater	Crawford	Highsmith	8-56	Robinson
659	Main C	Turner*	Crawford	Sanders	8-52	Robinson
607	Main C	F. T. Whittinghill	Crawford	Mitchell	6-53	Robinson
625	Main C	F. T. Whittinghill*	Crawford	"D.I.M."	7-53	Robinson
643	Main C	Wilson	Crawford	Hughes-Walker	8-55	Robinson
645	Main C	Wyman*	Crawford			Robinson
1008	Maple Grove C	Ashland	Edwards	Bennington*	9-52	McClosky
4127	Maple Grove C	Winmar	Wayne	W. Bennington	1-57	Aux Vases
2004	Markham City W	Gulf	Jefferson	W. Markham City U	4-54	Aux Vases, McClosky
214	Martinsville	Fröderman & Connelly	Clark	Fröderman & Connelly U		Partlow
1104	Mason N	Texaco	Effingham	Mason N U	10-58	Benoist
504	Mattoon	D. Carrell	Coles		4-59	Cypress & Rosiclare
503	Mattoon	W. Duncan	Coles	Redman-Macke	6-59	Cypress & Rosiclare
500	Mattoon	Humble	Coles	Mattoon	5-52	Cypress & Rosiclare
501	Mattoon	Noknil*	Coles	Mattoon	11-50	Rosiclare
4282	Maunie N C	Ashland	White	Ribeyre Island U	5-59	Waltersburg & Tar Springs
4272	Maunie N C	G. C. Schoonmaker*	White		10-58	Aux Vases & McClosky
4213	Maunie S C	Mobil	White	Palestine Sand U	2-53	Palestine
4273	Maunie S C	Skiles*	White	Brown-Alford	3-57	Cypress
1505	Mill Shoals	B. Kidd	Hamilton	Gardner*	9-56	Aux Vases
1506	Mill Shoals	Sohio	Hamilton	B. R. Gray, Trustee	5-52	Aux Vases
3919	Mt. Carmel	T. W. George*	Wabash	N. Mt. Carmel	8-55	Cypress
3920	Mt. Carmel	T. W. George*	Wabash			Cypress
3918	Mt. Carmel	D. H. Lovelace*	Wabash	Wabash U	10-57	McClosky

## WATERFLOOD OPERATIONS

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(Continued)

Information	Production and injection statistics (thousand bbls)						Map no.
Sec.-Twp.-Range	Secondary recovery						
	Water injection		Oil production		Water production		
	Total 1959	Cumulative 12-31-59	Total 1959	Cumulative 12-31-59	Total 1959	Cumulative 12-31-59	
27, 28-6N-13W							608
4, 9-7N-13W	499	1,470	44.2	77			606
5, 8, 9-7N-13W	675	2,318	110.8	263			611
5, 8, 9-7N-13W	52	128	8.7	20			669
	499	572	2.0	2			670
21, 22-5N-11W	4,877	19,795†	119.5	937†		1,000‡	612
25, 36-8N-13W	321*	1,072	5.9	24			615
28-6N-13W		2,313†		139†		413‡	616
29, 30-7N-13W	158	158	0.2	0			685
17,8N-12W		76†		2†		16†	618
23, 26-6N-13W	282	2,578	17.4	34	166	649	617
20-7N-12W	518*	3,173	37.8	297	175*	900*	619
5-6N-13W	182	521	1.6	2	17	17	671
6-6N-13W							672
9, 10, 11, 14, 15, 16-6N 13W	1,506	5,373*	174.4	703*	762	1,482†	620
2, 3, 10-7N-13W	779	1,562	137.0	177	300	324	621
27-6N-13W	2*						622
	17,788	99,009	1,163.9	7,061	9,495	42,189	623
35, 36-6N-12W		1,337*		41*		632*	624
34, 35-7N-13W	342	2,423	14.5	79	23	61	626
29, 30, 31, 32-7N-12W		977*		57*			609
18-7N-13W	406	2,773	16.3	230	401	1,400	629
14-6N-13W	177	1,295	35.6	164	85	297	630
16, 20, 21, 28, 29-5N-11W	1,664	5,640	115.3	412*	651	1,994	631
{ 13, 24-7N-13W }	1,561	4,401	165.3	308†	376	696	632
{ 18, 19-7N-12W }							
16, 17, 21, 22-6N-13W	339	528	28.9	40	35	52*	633
11-7N-13W	168	1,003	24.3	98	89	488	634
29-7N-13W	27	107	2.4	6	18	43	635
27, 34-6N-13W	390	3,970	34.2	567	380	2,497	636
26, 27-6N-13W	116	864	20.7	116	152	480	637
10, 15-7N-13W	328	3,907	11.2	458	256	2,069	638
13-7N-14W	150	866	32.0	215	65	194	639
15, 16-5N-11W	162	812	10.8	38	88	247	640
13, 14*-7N-13W	345	1,766	42.5	117	186	675	641
13, 14-7N-13W	155	426	12.0	60	88	264	642
18-7N-13W							644
20, 21-6N-12W	97	198	13.1	42	55	94	668
{ 1, 2, 3-5N-13W }		4,804		80			659
{ 26, 34, 35-6N-13W }							
24, 25-7N-13W	84	823	11.6	82*	28	89	607
25, 26-6N-13W	439	2,928	12.0	75*	175	549	625
26-6N-13W	627*	1,197*	14.0*	128*			643
34-6N-12W							645
7-1N-10E	66	479	17.7	136†			1008
13-1N-9E	33	106	5.9	20*	3	18	4127
3, 4, 9, 10-3S-4E	1,150	3,536	117.0	408*	833	1,743*	2004
13-9N-14W	720	3,600*	22.4	111*			214
9, 10-6N-5E	190	216	17.3	17	36	36	1104
24-12N-7E	16	16	2.5	3	2	2	504
	21	21					
23-12N-7E	11	11	0	0			503
	23	23					
35-12N-7E	1,408	7,973	74.0	2,898	621	3,140	500
22-12N-7E		249†		4†		87†	501
19, 30-5S-14W	130	130	14.3	14			4282
2-6S-10E		29†		0†		0†	4272
13, 18, 24-6S-10, 11E	1,702	11,150	56.0	1,633*	1,616	8,492	4213
18-6S-11E	35	105	14.3	27	0	0	4273
24-3S-7E	*	*	7.3	16†			1505
1-4S-7E	231	1,911	13.5	317*	219	907	1506
4, 5-1S-12W		350†		2†		3†	3919
32-1N-12W							3920
5-1S-12W							3918

TABLE 15.—

Map no.	Development as of 12-31-59						Injection water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source Sd=Sand Gr=Gravel Prod=Produced	Type F=Fresh B=Brine	Av. bbls per day per well per ft.	Max. well-head pressure reported PSI
	Inj.	Prod.			Sub-jected to inj.	Total				
608	12	17	5-Spot	10	130		Prod & Fresh	F & B		
606	16	16	5-Spot		142	231		F & B	3.9	550
611	28	24	5-Spot		182	230	Gr Beds & Prod	F & B	3.1	550
669	6	4	5-Spot		42			F & B	1.6	550
670	6	2	5-Spot		25			F & B	10.3	500
612	85	80	5-Spot	10	740	1,600	River Gr	F	6.6	650
615	5	14	Irregular	10	50	140	Lake	F	14.7	520
616										
685	68	78		6.6	380			F	0.3	200
618										
617	15	32	5-Spot	10	113	210	Penn.	B	3.4	580
619	29	30	5-Spot		280	330	Cypress	B	2.2	420
671	8	3	5-Spot	10	30	40	Well*	B	1.6	390
672	3	24	5-Spot	10	30	120	Gr & Purchased†	F & B		
620	80	105	5-Spot	5.5	540	740	Wells, Lake, & Prod	F & B	2.6	350
621	51	46	5-Spot	10	420	500	Lake & Prod	F & B	2.8	
622	3	13	5-Spot	10	30	130	Wells & Prod	F & B	0.1	
623	557	835	5-Spot	10	4 080		Gr Beds & Prod	F & B		
624	5	9	Line	5	100	120	Lake & Prod	F & B		
626	6	8	5-Spot	10	115	350	Penn.	B		450
609	14	37	5-Spot		55	393	Purchased	F		
629	13	21	5-Spot	7	80	124	Gr & Prod	F & B	3.4	640
630	10	8	5-Spot	10	61	90	Mahutska Plant	F & B	1.4	200
631	54	104	5-Spot	10	535	846	River & Prod	F & B	4.0	580
632	40	47	5-Spot	10	374	480	Cypress	F & B	0.3	520
633	11	28	5-Spot	10	118	231		F & B	3.8	460
634	11	18	5-Spot	10	79	165	Purchased	F & B	2.1	420
635	2	8	5-Spot	10	22	168	Purchased	F & B	1.2	550
636	11	11	5-Spot	10	93	94	Purchased	F	3.3	340
637	4	5	5-Spot	10	40	40	Purchased	F	2.4	500
638	16	28	5-Spot	4.4	104	210	Tar Springs	F & B	2.8	450
639	14	16	5-Spot	10	119	140	Purchased	F & B	1.2	560
640	6	9	5-Spot		55	80	Purchased	F & B	3.4	700
641	14	35	5-Spot	4.4	236	380	Purchased	F & B	2.9	400
642	7	7	5-Spot	10	54	60	Purchased	F & B	3.8	520
644										
668	3	12	5-Spot		22	96	Purchased	F & B	4.3	480
659	65	57	5-Spot	10	278	720	Water Well	B		
607	13	19	5-Spot	10	71	213	Prod	B	1.3	575
625	16	14	5-Spot	10	103	103	Prod	B	7.5	500
643	9	10	Perimeter		40	40	Gr & Prod	F & B	7.6	
645										
1008	2	5	Flank		110	110	Prod	B	18.0	
4127	1	5			30	40	Cypress Sd	B	6.0	1,100†
2004	13	14	Mod. 5-Spot	20	230	210	Cypress & Prod	B	6.5	500
					140	150				
214	50	42	5-Spot	3.6	240	500	Pond	F	1.6	300
1104	4	6	Perimeter	10	100	280	Tar Springs & Prod	B	11.8	1,040
504	2	8		10	100	100	Purchased	B		400
	1									200
503	1	3	5-Spot	20	30	30	Sewage	F		470
	2									300
500	41	62	5-Spot	20	736	970	Sewage	F	7.2	840
501										
4282	5	8	Irregular	10	115	120	Sd & Gr	F	6.8	1,200
4272	4	16		20	40	240		F		
4213	29	19	5-Spot	20	448	616	Gr & Prod	F & B		
4273	2	2	5-Spot	20	40	40	Shallow Sd	F	4.7	2,060
1505	1	2	Irregular	10	30	30	Hardinsburg	B		
1506	9	7	5-Spot	20	170	170	Gr Bed	F	6.4	260
3919	3	4	Line		70	70	Well	F		
3920										
3918	1	2			30	60				

(Continued)

Reservoir statistics (average values)						Remarks	Map no.
Depth feet	Net pay thickness feet	Porosity per cent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
900	20.0					*No data available to operator.	608
950	22.4	22.1	156	35.0	10.0 @ 78°F		606
950	21.0	19.5	77	33.0			611
950	15.0						669
950	22.4	22.1	156	35.0	10.0 @ 78°F		670
950	24.0	18.9	162	21.7	21.0 @ 60°F	*Includes data on all adjoining Franchot properties and line wells with Tidewater. †Includes Yingling cumulative figure. ‡Estimated to 1958. *CO <sub>2</sub> and N <sub>2</sub> added to water. *No data 1958-59. †As of 12-56; 1-56 to 10-56 not included. ‡As of 1-56.	612
890	12.0	23.0	85	36.0			615
					10.0 @ 80°F		616
950	20.0						685
							618
						*No data 1957-59. †As of 12-56.	
900	15.0	20.0	245			Previously subjected to gas injection.	617
940	22.0	20.5	167	36.0	7.0 @ 80°F	*Estimated	619
800	40.0	20.1	143	34.4		*MacDonnell Co.	671
800	40.0	20.1	143	34.6		*No data 1959. †From Ohio Oil Co.	672
925	20.0	19.0	150	33.0		Previously subjected to gas injection. *Includes estimate of 1957 production and injection. †Since 1-58.	620
980	15.0	20.0	150	33.0		Previously subjected to gas injection.	621
920	20.0	18.0	150	33.0		*Injection wells operated by Ohio & W Duncan.	622
		20.0				Some projects previously subjected to gas injection.	623
						*Wilken, Hughes, Brubaker, Hill-Darough, Hargis, Read, Drake, Fawley, Eaton, Henry, Wilson, Wood, Barnes, Kirland, Mann, Hamilton, Shire, Fry, Ducommun, Thompson, Haines, Arnold, Nevlin, Shilts, Kent. Formerly carried as 623, 646-58, 673-78.	
1,006	12.0	24.3	240	26.0		*No data 1959.	624
925	20.0	30.0	45				626
900	50.0	17.0	170	34.0		Previously subjected to gas injection. *No data 1959.	609
						†Formerly owned by E. Constantin.	
910	25.4	19.9	278	34.0		Subjected to gas injection since 1957.	629
881	34.3	19.1	108	32.0		Subjected to gas injection.	630
950	20.9	19.4	197	30.1		Subjected to gas injection 1946-1952. *Includes primary production since 8-54.	631
950	32.3	20.0	152	35.0	7.0 @ 69°F	Subjected to gas injection since 1957. *Includes 644.	632
						†Includes primary production since 3-54.	
930	21.6	21.0	378	35.0		Subjected to gas injection since 1957. *1958 cumulative adjusted by operator.	633
950	20.2	19.6	184	35.3		Subjected to gas injection 1935-1953 and since 1957.	634
980	27.8	20.0		35.0		Subjected to gas injection 1935-1953.	635
875	32.0	19.8	178	32.7		Subjected to gas injection 1932-1950.	636
860	32.9	19.8	108	33.0		Subjected to gas injection 1932-1950.	637
935	20.2	21.0	175	35.0	7.0 @ 60°F	Subjected to gas injection 1934-1948.	638
910	24.4	20.0	250	34.0		Subjected to gas injection 1934-1948.	639
979	22.4	19.0	144	32.0		Subjected to gas injection 1934-1948.	640
980	23.4	18.2	221	33.5		Subjected to gas injection since 1934. *Changed by present operator.	641
987	15.9	20.0	100	35.0		Subjected to gas injection since 1934.	642
						*Included with 632; to be dropped in 1960.	644
920	25.1	20.0	80	35.0		Subjected to gas injection 1934-1948.	668
880	20.0	21.0	205	32.0		Previously subjected to gas injection. *Formerly owned by Schoonmaker; No data 1959.	659
900	14.0	21.1	79	33.5	10.0 @ 78°F	*Includes primary production since 6-53. Previously subjected to gas injection. *Since 1-54.	607
830	10.5	21.2	10	31.0	17.2 @ 78°F		625
940	25.0	19.0	83	33.4		Previously subjected to gas injection. *Estimated since 1951.	643
						*No 1957-1959 data.	645
3,100	5.0	0	0	38.0		*Controlled dump flood. †Includes primary production since 9-52.	1008
3,150	15.0	22-26	50	37.0		*Includes primary production since 5-57. †Estimated.	4127
2,900	22.1		269	38.0	3.2 @ 99°F		2004
3,000	15.4		230		2.8 @ 104°F		
415-445	25.0	24.0	43	32.0		*Estimated injection since 1-56. †Includes primary production since 7-55.	214
2,280	11.0	16.0	24	37.0-38.2			1104
1,750	8.5			36.0			504
1,950							503
1,750	13.0	16.0	84	39.0	1.7 @ 85°F		500
1,950							
						*No data reported 1957-1959. †As of 1-55.	501
2,305	10.0	18.4	204	36.0			4282
2,345	6.0						
2,940	15.0			35.0		*No data 1959. †Excluding 1959.	4272
2,010				36.6		*Includes primary production since 2-53.	4213
2,582	10.0					*Formerly B. J. Wilson.	4273
3,243	11.0					*Dump flood. †Includes primary production since 1-57.	1505
3,245	11.0	21.0		37.0		*Includes primary production since 5-52.	1506
						*No data 1959. †Excluding 1957 and 1959.	3919
						*No data 1957-1959.	3920
2,307	8.0					*Was First Nat'l. Petro. Trust; no data 1959.	3918

TABLE 15.—

Map no.	General					
	Field C=Consolidated	Operator	County	Project U=Unit	Date first injection	Formation
3921	Mt. Carmel	O'Meara Bros.	Wabash	Mt. Carmel U	7-54	Cypress
3922	Mt. Carmel	Shell	Wabash	Mt. Carmel U	7-54	Cypress
3923	Mt. Carmel	Skiles	Wabash	Chapman-Courter U	1-55	Cypress
3924	Mt. Carmel	Skiles	Wabash	W. Mt. Carmel	10-55	Tar Springs
3925	Mt. Carmel	Texaco	Wabash	Stein	2-52	Tar Springs
3926	New Harmony C	Ashland	Wabash	Maud N.	4-56	Benoist
3927	New Harmony C	Ashland	Wabash	Ravenstein	5-57	Benoist
4218	New Harmony C	Calstar	White	Ford	1-56	Aux Vases
4219	New Harmony C	Calstar*	White	Ford "B"	3-53	Bethel
3928	New Harmony C	Cities Service	Wabash	Brines U	8-56	Benoist
4220	New Harmony C	Clark & Clark	White	Maunie N. U	10-57	Aux Vases
3960	New Harmony C	Continental	Wabash	A. E. Shultz "A"	5-59	Benoist
3961	New Harmony C	Continental	Wabash	Benoist A. E. Shultz "A"	5-59	Cypress
3963	New Harmony C	Coy	Wabash	Cypress Kerwin U	10-59	Biehl, Benoist, Aux Vases
4221	New Harmony C	Coy*	White			Cypress & Aux Vases
3907	New Harmony C	T. W. George*	Wabash	E. Maud	7-52	Bethel
3947	New Harmony C	T. W. George*	Wabash	E. Maud	1-55	Cypress
3929	New Harmony C	G. R. Co.*	Wabash	Shultz Lease	7-51	L. Cypress
3930	New Harmony C	G. R. Co.*	Wabash	Shultz Lease	5-52	U. Cypress
4225	New Harmony C	Herndon	White	Calvin U		Benoist
4226	New Harmony C	Herndon	White	Calvin U	6-57	Cypress
4224	New Harmony C	Herndon & Ashland	White	Calvin	11-52	Aux Vases
3955	New Harmony C	Indiana Farm Bureau	Wabash	Landis-Goins	3-57	Cypress
4227	New Harmony C	Inland	White	Bowman's Bend U	12-53	Tar Springs
3936	New Harmony C	Luboil	Wabash	Helm U	11-54	Cypress "A"
3937	New Harmony C	Luboil	Wabash	Helm U	10-54	Cypress "C"
3938	New Harmony C	Luboil	Wabash	Helm U	12-51	Aux Vases
3939	New Harmony C	Luboil	Wabash	Helm U	12-51	Benoist
3940	New Harmony C	Luboil	Wabash	Helm U	12-50	Waltersburg
4276	New Harmony C	Mabee	White	O. Smith	8-59	Cypress
4274	New Harmony C	Mobil	White	J. J. Bond	11-52	Cypress, Paint Creek, Aux Vases
4275	New Harmony C	Pure*	White	Calvin C	9-58	Tar Springs, Cypress, Paint Creek & Aux Vases
3962	New Harmony C	P. Rossi	Wabash	4 W	10-59	Cypress
4214	New Harmony C	J. Simpkins*	White	†	9-56	Aux Vases
4215	New Harmony C	J. Simpkins*	White	†	9-56	Benoist
4216	New Harmony C	J. Simpkins*	White	†	9-56	L. Cypress
4217	New Harmony C	J. Simpkins*	White	†	9-56	McClosky
4231	New Harmony C	Sinclair	White	M. S. Donald	10-56	Aux Vases
1016	New Harmony C	Skiles	Edwards	Siegert Bottoms	8-58	Cypress
3931	New Harmony C	Skiles	Wabash- Edwards	Siegert Bottoms	10-51	Bethel
3932	New Harmony C	Skiles	Wabash	E. Maud	4-52	Bethel
3933	New Harmony C	Skiles	Wabash	E. Maud	11-52	Cypress
3934	New Harmony C	Skiles	Wabash	W. Maud	10-50	Bethel
3956	New Harmony C	Skiles	Wabash	Cowling-Raber	5-57	Benoist
3957	New Harmony C	Skiles	Wabash	Broster "F"	10-56	Cypress
4286	New Harmony C	Skiles	White	Calvin Griffin C	9-59	Benoist
4287	New Harmony C	Skiles	White	Calvin Griffin C	9-59	Cypress
4288	New Harmony C	Skiles	White	Calvin Griffin C	9-59	Aux Vases
3935	New Harmony C	Sohio	Wabash	Updegraff "A"	10-55	Cypress
4233	New Harmony C	Sun	White	Ford "B"*	3-53	Aux Vases
4235	New Harmony C	Superior	White	Kern-Hon U	2-54	Tar Springs
4236	New Harmony C	Superior	White, Ill. Posey, Ind.	New Harmony Field U	11-56	Aux Vases
4237	New Harmony C	Superior	White, Ill. Posey, Ind.	New Harmony Field U	11-56	Bethel
4238	New Harmony C	Superior	White, Ill. Posey, Ind.	Waltersburg Sand U	8-46	Waltersburg
4280	New Harmony C	Superior	White, Ill. Posey, Ind.	Ford U	3-59	Aux Vases
3948	New Harmony C	A. K. Swann	Wabash	Helm U		Cypress
3965	New Harmony C	A. K. Swann	Wabash	Helm U	6-59	Biehl
4284	New Harmony C	Texaco	White	M. E. Glaze Coop.	12-59	Paint Creek, Benoist
4285	New Harmony C	Texaco	White	M. E. Glaze Coop.	12-59	Cypress
4290	New Harmony C	Texaco	White	M. E. Glaze Coop.	12-59	Tar Springs

## WATERFLOOD OPERATIONS

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(Continued)

Information	Production and injection statistics (thousand bbls)						Map no.
Sec.-Twp.-Range	Secondary recovery						
	Water injection		Oil production		Water production		
	Total 1959	Cumulative 12-31-59	Total 1959	Cumulative 12-31-59	Total 1959	Cumulative 12-31-59	
17-1S-12W	152	1,538	11.5	114			3921
17, 18-1S-12W	1,079	4,778	73.4	773*	852	2,255	3922
7, 18-1S-12W	134	744	28.5	228	99	283	3923
18-1S-12W	121	491	11.7	87	100	195	3924
5, 8-1S-12W	143	791	5.1	89	81	525*	3925
5, 6, 7, 8-2S-13W	67	292	19.7	92*			3926
32-1S-13W	14	55	11.3	29			3927
21, 22-4S-14W	272	1,514*	73.7	299*			4218
21-4S-14W	100	1,113	6.6	104			4219
20, 21, 28, 29-1S-13W	792	3,110	242.4	830	330	528	3928
18, 19-5S-14W	313	929	82.7	150	190	190*	4220
8, 17-2S-13W	114	114	10.6*	11*	11*	11*	3960
8, 17-2S-13W	84	84	*	*	*	*	3961
14, 15, 22-3S-14W	115	115	30.4	30	6	6	3963
17-4S-14W							4221
32, 33-1S-13W		98†		55††			3907
32, 33-1S-13W		31†		55††			3947
7-3S-13W	104	2,693	1.8	126	29	1,982	3929
7-3S-13W	7	816	0.6	44	11	356	3930
5, 8-4S-14W	359	1,620	*	*	*	*	4225
5, 8-4S-14W	100	214	*	*	*	*	4226
5, 8-4S-14W	1,032	5,101	116.6*	692*	607*	607*†	4224
3-2S-13W	15	62	3.9*	11*	36		3955
15, 16, 21, 22-5S-14W	631	3,770	194.5	1,174*	353	1,632†	4227
22-3S-14W	202	1,095	185.0*	2,743*	1,000*		3936
22-3S-14W	207	1,137	*	*	*	*	3937
22-3S-14W	499	3,541	*	*	*	*	3938
22-3S-14W	555	5,025	*	*	*	*	3939
22-3S-14W	335	2,347	*	*	*	*	3940
4-4S-14W	15	15	4.3	4			4276
8-4S-14W	*	*	24.0	106†		116‡	4274
9, 16-4S-14W				21†		22†	4275
26-1S-13W	16	16			16	16	3962
{ 32, 33-3S-14W }	228	683	22.6	39‡	26.0		4214
{ 5-4S-14W }							
32-3S-14W	139	539	10.3	23‡	56.7		4215
33-3S-14W	183	536	37.0	48‡	10		4216
{ 32, 33-3S-14W }	180	762	1.0	31‡	202		4217
{ 5-4S-14W }							
21, 28-4S-14W	257	689	51.7	62*	78	88	4231
34-2S-14W	20	33	0	0	0	0	1016
{ 2, 3, 19-3S-14W }	264	2,436	44.8	532	116	532	3931
{ 34-2S-14W }							
{ 4, 5-2S-13W }	120	963	12.8	215	16	183	3932
{ 32, 33-1S-13W }							
{ 4, 5-2S-13W }	263	1,004	29.3	114	42	311	3933
{ 32, 33-1S-13W }							
{ 32-2S-13W }	88	1,946	15.5	391*	31	344	3934
{ 5-1S-13W }							
17-2S-13W	14	28	1.7	2	5	9	3956
35-2S-14W	16	69	3.1	9	3	7	3957
8-4S-14W	23	23	0	3*	6	6	4286
8-4S-14W	0	0	0	0	5	5	4287
8-4S-14W	14	14	0.1	3*	6	6	4288
14-3S-14W	202	802	218.0	1,011*	202	802	3935
21-4S-14W	29	267	22.3	101	33	105	4233
32, 33-4S-14W	171	972	29.4	387	93	336	4235
{ 3, 4, 5-5S-14W }	2,102	5,718	*	*	*	*	4236
{ 26, 27, 28, 29, 32, 33, 34-4S-14W }							
{ 3, 4, 5-5S-14W }	3,746*	14,076*	1,193.8*†	2,603*†	1,401*††	7,260*††	4237
{ 26, 27, 28, 29, 32, 33, 34-4S-14W }							
{ 4, 5, 9, 10-5S-14W }	1,891*	22,747*	149.2*	3,972*	1,283*	6,478*	4238
7, 8-5S-14W	668	668	27.4	27	10	10	4280
7, 18-3S-13W	169	590	36.1	670	18		3948
22-3S-14W	35	35	*	*	*	*	3965
8, 17-4S-14W	7	7	*	*	*	*	4284
8, 17-4S-14W	1	1	*	*	*	*	4285
8, 17-4S-14W	2	2	*	*	*	*	4290

TABLE 15.—

Map no.	Development as of 12-31-59						Injection water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source Sd=Sand Gr=Gravel Prod=Produced	Type F=Fresh B=Brine	Av. bbls per day per well per ft.	Max. well-head pressure reported PSI
	Inj.	Prod.			Sub-jected to inj.	Total				
3921	6	15			234				5.3	975
3922	20	25	5-Spot	20	325	570	Well Surface†	F	10.6	500
3923	4	6	Peripheral		100	100	River & Prod	F & B	4.8	460
3924	3	3		10	70	40	Prod	B	18.4	1,560
3925	2	2	Flank		73	73	Sd & Prod	F & B	16.3	1,275
3926	5	6	Peripheral	20	130	160	Purchased	B	5.7	1,500
3927	1	2			20		Purchased		5.3	1,500
4218	7	7	5-Spot	10	95	215	Gr	F	5.9	1,400
4219	2	2		20	20	35	Gr	F	11.4	1,500
3928	30	33	5-Spot	10	524	630	Prod & Penn. Sd	B	4.2	1,120
4220	9	10	5-Spot	10	190	190	Gr	F	8.0	1,250
3960	6	11	5-Spot	10	100	160		F	3.9	1,475
3961	3	10	5-Spot	10	100	160		F	9.5	1,450
3963	15	23	5-Spot	10	129	340	Shallow Gr	F	3.5	650
					255					
					110					
4221										
3907										
3947										
3929	2	4	Irregular	10	9	70	Shallow Sd & Prod	F & B	7.1	1,250
3930	2	4		10	9	30	Shallow Sd & Prod	F & B	5.5	720
4225	10	8	Line		90	90			6.6	1,225
4226	3		Line				Well	F	6.3	1,350
4224	19	18	Line		200	250		F	5.0	1,100
3955	1	2			20		Prod	B		1,100
4227	3	15	Peripheral		200	200	Gr Bed & Prod	F & B	29.8	545
3936	7	9			120	120	Gr Beds	F	9.9	1,200
3937	4	9			120	120	Gr Beds	F	14.2	1,200
3938	18	27			260	260	Gr Beds	F	5.4	1,200
3939	32	24			255	255	Gr Beds	F	3.4	1,200
3940	4	1			30	30	Gr Beds	F	9.2	1,200
4276	3	5	5-Spot	10	65	130	Purchased	F	2.3	750
4274	4*	9	Irregular		108	120	Shallow Sd & Prod	F & B		
4275	13	15	5-Spot	20	280	280	Gr	F		
3962	1	5			50	50	Prod	B	14.0	20
4214	10	16	5-Spot	20	163	323	River & Gr	F	4.5	1,480
4215	4	4	5-Spot	20	50	131	River & Gr Beds	F	8.6	1,480
4216	4	7	5-Spot	20	45	165	River & Gr Beds	F	13.9	1,480
4217	4	7	5-Spot	20	85	302	River & Gr Beds	F	14.9	0
4231	3	10	Peripheral	10	105	123	Gr & Prod	F & B	11.2	1,130
1016	1	2	5-Spot	20	15	30	Gr & Prod	F & B	4.5	1,500
3931	19	23	5-Spot	20	380	430	Gr & Prod	F & B	2.1	1,500
3932	7	17	5-Spot	20	200	280	Creek, Shallow Sd & Prod	F & B	5.9	1,500
3933	3	9	5-Spot	20	60	100	Creek, Shallow Sd & Prod	F & B	30.0	880
3934	6	9	5-Spot	20	100	160	Creek & Shallow Sd	F & B	3.3	1,425
3956	1	4	Line		35	50	Creek & Shallow Sd	F & B	2.6	1,425
3957	1	3			30	40	Gr & Prod	F & B	3.5	1,500
4286	2	2	5-Spot	20	40	40	Shallow Gr & Prod	F & B	9.3	200
4287	1	1			10	20	Shallow Gr & Prod	F & B	0.3	620
4288	2	2	5-Spot	20	40	40	Shallow Gr & Prod	F & B	2.9	620
3935	1	12	Line	10	120	200	Prod	B	22.1	0
4233	1	1		20	20	80	Gr Beds	F	7.9	1,500
4235	4	6	Mod. Split Line		121	121	Gr Beds	F	9.0	1,220
4236	10 A.V. 48 Dual	81	5-Spot	20	2,029	2,029	Gr & Prod	F & B	11.1	1,075†
4237	29 Bethel 48 Dual	128	5-Spot	20	2,576	2,576	Gr & Prod	F & B	11.1	1,000†
4238	6	12	Split Line		725	725	Gr Bed & Prod	F & B	20.1	1,215
4280	11	17	Irregular 5 Spot	20	262	262	Gr	F	15.3	1,400
3948	5	9			140	140	Gr	F	6.2	1,250
3965	2	2			40	40	Gr	F	5.6	1,200
4284	6	20	5-Spot	10	200	200	Shallow Sd & Prod	F & B	1.6	
4285	4	11	5-Spot	10	200	200	Shallow Sd & Prod	F & B	0.6	630
4290	4	8	5-Spot	10	200	200	Shallow Sd & Prod	F & B	2.3	

(Continued)

Reservoir statistics (average values)						Remarks	Map no.
Depth feet	Net pay thickness feet	Porosity per cent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
2,140	13.0			33.0			3921
2,075	13.6	19.0	182	38.8		*Adjusted by operator. †Prior to 4-57 fresh and brine used for injection.	3922
2,230	19.0	18.2	15				3923
1,729	6.0						3924
2,040	11.6	18.9	221	34.8	4.0	*Adjusted to 1958 value.	3925
2,650	6.5	16.0	60			*Includes primary production since 4-56.	3926
2,650	7.0	16.0	65				3927
2,840	18.3	15.0	20	33.1	4.8 @ 70°F	*Includes injection and production since pilot flood 3-53.	4218
2,695	12.0			37.5	3.7 @ 96°F	*Co-op pilot flood with Sun.	4219
2,600	17.0	16.0	35	35.0			3928
2,900	12.0					*Since 1-59.	4220
2,540	20.0	15.3	41	38.0	7.0	*Includes 3961.	3960
2,425	12.0	19.3	268	38.0	7.0	*Included with 3960.	3961
1,805	11.0	21.0	20	33.0	6.5 @ 85°F		3963
2,690	13.0	16.2	31	35.0	5.3 @ 95°F		
2,810	8.0	16.0	30	37.0	4.5 @ 105°F		
2,500	15.0	17.0	57	36.1	5.1 @ 94°F	*Project discontinued before injection began. *This part of the unit has been abandoned. †As of 12-56. †Includes primary production since 7-52.	4221 3907
2,400	12.0					*This part of the unit has been abandoned. No. 1958-1959 data. †As of 12-56. †Includes primary production since 1-55.	3947
2,600	20.0	18.0	50	38.0		*Formerly Phillips Pet.	3929
2,500	10.0	17.0†	100†	38.0		*Formerly Phillips Pet. †Estimate.	3930
2,700	15.0					*Included with 4224.	4225
2,550	15.0					*Included with 4224.	4226
2,800	30.0	14.0	10	41.0		Previously subjected to gas injection. *Includes 4225 and 4226. †Since 3-59.	4224
2,340				36.0		*Includes primary production since 3-57.	3955
2,260	19.5	17.9	120	35.5		*Includes primary production since 1-54. †Since 1-54.	4227
2,520	8.0					*Includes 3937, 3938, 3939, 3940, and 3965.	3936
2,550	10.0					*Included with 3936.	3937
2,640	14.0	17.1	44			*Included with 3936.	3938
2,640	14.0	17.1	44			*Included with 3936.	3939
2,115	25.0	20.1	171			*Included with 3936.	3940
2,546	14.0						4276
2,585				35.0	4.0 @ 100°F	*All water injected by 4 Herndon operated line wells. †Estimated. †Since 8-58.	4274
2,705							
2,820							
2,208	10.0	18.0	50			*No data 1959. †Excluding 1959.	4275
2,579	6.5	17.0	40				
2,694	11.0	17.0	50				
2,812	18.0	18.0	70				
2,301	12.0						
2,800	14.3	13.3	2	33.7	4.7 @ 97°F	*Formerly operated by Arrow. †Arrow-McBride-Hon-Bump Crawford waterflood. †Excluding 1957-1958.	3962 4214
2,650	10.8	12.7	3	35.5	4.5 @ 96°F	*Formerly operated by Arrow. †Same as 4214. †Excluding 1957-1958.	4215
2,600	8.9	15.6	8	34.5	6.0 @ 96°F	*Formerly operated by Arrow. †Same as 4214. †Excluding 1957-1958.	4216
2,900	9.4			34.5	4.2 @ 98°F	*Formerly operated by Arrow. Abandoned 12-59. †Arrow-McBride-Hon-Bump-Crawford waterflood. †Excluding 1958.	4217
2,830	21.0	14.2	23	27.0		*Adjusted to 1957 value.	4231
2,566	12.0						1016
2,680	18.0	17.0	75	36.5	3.8 @ 81°F		3931
2,520	8.5	17.0	57	36.1	5.1 @ 94°F		3932
2,400	8.0	18.5	75	36.2	5.0 @ 90°F		3933
2,620	12.0	17.2	57	37.0	4.6	*Adjusted by operator.	3934
2,549	15.0						3956
2,531	13.0						3957
2,680	10.0					*Increased oil from water injection in adjoining project.	4286
2,552	10.0						4287
2,800	20.0					*Increase due to water injected in adjoining project.	4288
2,500	25.0	21.0	200	37.0		*Total lease production—Cypress, Benoist, Aux Vases and McClosky commingled.	3935
2,855	10.0	13.0	30	32.5		*Cooperative flood with Calstar.	4233
2,250	13.3	17.3	44	38.0	5.5 @ 85°F		4235
2,460	8.9	17.9	48	36.4	3.7 @ 96°F	*Included with 4237. †Estimated.	4236
2,340	12.4	15.4	32	36.8	4.3 @ 94°F	*Figure includes cumulative injection and secondary production prior to unit operation. †Includes 4236. †Cumulative water production from all zones within unit area. **Estimated.	4237
2,206	43.0	19.2	475	36.8	2.9 @ 86°F	Previously subjected to gas injection. *Includes Indiana data.	4238
2,500	12.7	18.1	43	36.4	3.7 @ 96°F		4280
2,450	15.0						3948
1,800	15.0					*Included with 3936.	3965
2,670	25.0			36.4		*Included with 4291.	4284
2,570	11.0			36.4		*Included with 4291.	4285
2,215	9.0			36.4		*Included with 4291.	4290

TABLE 15.—

Map no.	General					
	Field C=Consolidated	Operator	County	Project U=Unit	Date first injection	Formation
4291	New Harmony C	Texaco	White	M. E. Glaze Coop.	12-59	Aux Vases
4240	New Harmony C	Tidewater	White	E. S. Dennis "A"	7-51	Bethel
4241	New Harmony C	Tidewater	White	O. R. Evans	1-56	Aux Vases
4242	New Harmony C	Tidewater	White	O. R. Evans	10-49	Biehl
4243	New Harmony C	Tidewater	White	O. R. Evans	1-50	McClosky
4244	New Harmony C	Tidewater	White	E. S. Dennis "A"	9-57	Aux Vases
4283	New Harmony C	J. H. Vandembark	White	Calvin-Hon U		Tar Springs, Cypress, Benoist, Aux Vases
3949	New Harmony C	West*	Wabash	C. W. Raber	10-56	Biehl
4289	New Harmony S (Ind.)	Indiana Farm Bureau	White, Ill.	Mink Island U	7-59	Waltersburg
4247	New Haven C	Hiawatha	Posey, Ind. White	New Haven U	7-54	Cypress
4248	New Haven C	Hiawatha	White	New Haven U	7-54	Tar Springs
4278	New Haven C	Sinclair	White	G. N. Boetticher	8-59	Cypress
223	Oak Point	D. B. Lesh	Clark	B. Finney	10-58	Aux Vases
2600	Odin	Ashland	Marion	Odin	10-49	Cypress
000	Old Ripley	Cahill & Smith	Bond	Ripley	9-57	Penn.
1903	Olney C	Gulf	Jasper	Bessie	5-54	McClosky
3407	Olney C	Gulf	Richland	E. Dundas U	10-56	McClosky
1904	Olney C	Sohio	Jasper	Dundas E. U	4-55	Ohara
3408	Olney C	Texaco	Richland	E. Olney U	3-51	McClosky
307	Oskaloosa	Texaco	Clay	Oskaloosa U	1-53	Benoist
3409	Parkersburg C	Ohio	Richland	Parkersburg U	3-55	McClosky
1017	Parkersburg C	Yingling	Edwards	Parkersburg U	2-59	U. Cypress
1020	Parkersburg C	Yingling	Edwards	Parkersburg U	2-59	L. Cypress
308	Passport	Mobil	Clay	Stanley-Hinterscher- Malin U	9-57	McClosky
327	Passport	Shakespeare	Clay	Passport U	7-58	McClosky
3417	Passport S	Calvert	Richland	Passport S U	8-59	Cypress
2601	Patoka	Sohio	Marion	Patoka Benoist	9-43	Benoist
2602	Patoka	Sohio	Marion	Patoka Rosiclare U	1948	Rosiclare
2603	Patoka	Sohio	Marion	Stein U	8-51	Cypress
4250	Phillipstown C	Bayview*	White	Grayville U	8-54	L. Cypress
4249	Phillipstown C	C. E. Brehm	White	Phillipstown U "B"	1-54	Cypress
4251	Phillipstown C	British American	White	N. Calvin U	6-51	Penn.
4277	Phillipstown C	Kirby	White	W.P.B.S. U	9-59	Benoist
4252	Phillipstown C	Mobil	White	N. Calvin	5-51	Biehl
4253	Phillipstown C	Phillips	White	Flora U	9-53	Degonia
4254	Phillipstown C	Phillips	White	Laura	3-52	Bethel
4255	Phillipstown C	Phillips	White	Phillipstown U	10-57	Benoist & Aux Vases
4256	Phillipstown C	Sun	White	Phillipstown U	12-55	Clore
4257	Phillipstown C	Sun	White	Phillipstown U	2-56	Tar Springs
2900	Raymond E	Mobil	Montgomery	Foster-Poggenpohl U	8-59	Penn.
4262	Roland C	T. W. George*	White & Gallatin	Pankey-Morehead U	10-56	Cypress
1418	Roland C	Humble	Gallatin & White	South Roland	6-59	Cypress & Aux Vases
4258	Roland C	Humble	White	S. W. Roland U	6-55	Waltersburg
4259	Roland C	Humble	White	Stokes U	7-54	Hardinsburg
1413	Roland C	Indiana Farm Bureau	Gallatin	Omaha U	3-53	Waltersburg
4260	Roland C	Pure	White	Stokes-Brownsville U	4-56	Hardinsburg
4261	Roland C	Shell	White	Iron U	12-50	Hardinsburg
318	Sailor Springs C	Ashland	Clay	E. Flora	11-56	McClosky
328	Sailor Springs C	Ashland	Clay	Sailor Springs	4-58	Cypress & Tar Springs
1100	Sailor Springs C	Ashland	Effingham	Bible Grove	7-54	Rosiclare & McClosky
319	Sailor Springs C	Breuer & Currin	Clay	Clay City N E		Ohara
309	Sailor Springs C	Cities Service	Clay	Wyatt	9-53	Aux Vases
1102	Sailor Springs C	W. Duncan	Effingham	Brink	12-57	Cypress
310	Sailor Springs C	Gulf	Clay	R. Keck	9-57	Cypress
1103	Sailor Springs C	Kingwood	Effingham	Nadler	6-55	Rosiclare & McClosky
312	Sailor Springs C	W. C. McBride	Clay	Goldsbey-Dickey	9-55	Cypress
313	Sailor Springs C	W. C. McBride	Clay	Duff-Keck	7-53	Cypress
314	Sailor Springs C	W. C. McBride*	Clay	Bothwell	8-56	Cypress
311	Sailor Springs C	Mobil	Clay	Sailor Springs U	3-55	Cypress
315	Sailor Springs C	Shulman Bros.	Clay	Colclasure	7-57	Cypress

(Continued)

Information	Production and injection statistics (thousand bbls)						Map no.
Sec.-Twp.-Range	Secondary recovery						
	Water injection		Oil production		Water production		
	Total 1959	Cumulative 12-31-59	Total 1959	Cumulative 12-31-59	Total 1959	Cumulative 12-31-59	
8-4S-14W	3	3	1.2*	1*	1*	1*	4291
28, 33-4S-14W	312	7,618	5.8	443	91	1,893	4240
4-4S-14W	400*	2,070*	49.7*	409*†	244*	782*†	4241
4-4S-14W	*	*	*	*	*	*	4242
4-4S-14W	*	*	*	*	*	*	4243
28, 33-4S-14W	548	1,175*	59.6	214	395	469	4244
9-4S-14W	455	455	15.9	16	49	49	4283
{19-2S-13W}							3949
24-2S-14W							
22-5S-14W	470	470	*	*	31	31	4289
17-7S-11E	133	779	82.1	414*	10	32	4247
17-7S-11E	2	90	0.8	30*	2	7	4248
19-7S-14W	3	3	1.5	1	2	2	4278
31-9N-14W	90	90	5.5	6	45	45	223
{1, 12, 13-2N-1E}	738	5,347	28.6	1,261			2600
{6, 7, 18-2N-2E }							
21, 28-5N-4W	91	224				12*	000
23-5N-10E	221	754	5.4	44*	150	433	1903
25, 26, 35, 36-5N-10E	207	557	64.3	83*	23	30	3407
14-5N-10E	329*	1,537*	17.3	127	293	1,107	1904
23, 24, 25, 26-4N-10E	377	2,124	29.4	178	238	708*	3408
26, 27, 34, 35-4N-5E	583	4,756	92.4	941	270	1,440*	307
29-2N-14W	1,148*	5,138*	57.1*	436*	995*	3,235*	3409
6-1N-14W	23	23	*	*	*	*	1017
31-2N-14W	270	270	10.9*	11*	8	8	1020
12-4N-8E	0	65	2.0	5*	3	6	308
11, 12, 14-4N-8E	759*	1,055*	55.6	58	131	134	327
Fr. 18-4N-9E	14	14	0.8	1	1	1	3417
20, 21, 28, 29-4N-1E	2,288	51,033	38.9	6,386	2,573	37,107	2601
21, 28, 29-4N-1E	676	6,800	27.8	1,403*	258	2,337	2602
28-4N-1E	103	826	1.9	57*	103	590	2603
20, 29-3S-14W	57	453	12.2	97†	87		4250
19, 30-4S-11E	54	185*	8.7	61†			4249
31-3S-14W	312	2,725	42.9	1,130*	337	1,816	4251
26, 35-4S-10E	84	84	0	0	12	12	4277
30, 31-3S-11E	41	1,154	8.0	423*	36	494	4252
24-4S-10E	107	820	5.9	73	77	406	4253
19-4S-11E	21	136*	1.5	4	5	9	4254
30-4S-11E	336	886	36.6	52	80	142	4255
6-5S-11E	49	234	11.4	106	6	54	4256
6-5S-11E	11	58	0	0	0	0	4257
15, 22-10N-4W	1	1	0.3*		1	1	2900
17, 20-7S-8E				0†			4262
16, 21, 22-7S-8E	99	99	1.1	1	2	2	1418
14, 15, 16-7S-8E	2,401	8,490	355.4	637*	616	1,149	4258
5-6S-9E	512	2,720	72.9	486*	302	968	4259
20, 21, 28, 29-7S-8E	1,548	7,802*	113.8	1,068†	803	3,013	1413
{36-5S-8E}	1,853	6,973	345.1	1,596	1,060	1,754	4260
{31, 32-5S-9E}							
{1, 12-6S-8E}							
23, 24, 25-6S-8E	1,265	10,199	100.6	1,997	909	4,874	4261
16, 21-3N-7E	157	458	29.4	82*			318
26-4N-7E	274	469	18.4	33			328
28, 29-6N-7E	296*	1,247*	21.2	97†			1100
18-3N-7E	752	2,386	52.9	243	627		319
13-5N-7E	103	678	3.0	36	58	358	309
34-6N-7E	76	175	6.0	7	2	2	1102
26-4N-7E	22	60	7.0	19*	14	34	310
28-6N-7E	252*	838*	6.4	54†	92	309	1103
34-4N-7E	88	348	2.9	13	21	46*	312
26, 35-4N-7E	227	717*	23.3	99	89	241†	313
14-3N-7E	29	108	2.4	6	18†	18†	314
14, 15, 23-4N-7E	413	2,560	60.0	548*	259	1,116	311
10-3N-7E	11	116†		7†	86	188†	315

TABLE 15.—

Map no.	Development as of 12-31-59						Injection water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source Sd=Sand Gr=Gravel Prod=Produced	Type F=Fresh B=Brine	Av. bbls per day per well per ft.	Max. well-head pressure reported PSI
	Inj.	Prod.			Sub-jected to inj.	Total				
4291	9	19	5-Spot	10	200	200	Shallow Sd & Prod	F & B	1.0	
4240	9	4	5-Spot	10	160	185	Shallow Gr	F	3.2	1,450
4241	7	12	5-Spot	20	140	167	Shallow Gr & Prod	F & B	3.0	1,600
4242	*	*	5-Spot	20	*	*	Shallow Gr & Prod	F & B	*	*
4243	*	*	5-Spot	*	*	*	Shallow Gr & Prod	F & B	*	*
4244	17	16	5-Spot	10	147	184	Shallow Sd & Gr	F	4.9	1,650
4283	9	9	5-Spot	10	130	170		F		645
3949										
4289	12	70			760			F	12.1	210
4247	8	12			390	477	Well	F	4.5	1,340
4248	2	4			360	447	Well	F	0.3	1,340
4278	1	2		10	40	40	Prod	B	2.3	1,800
223	2	7		10	160	80	Well	B	6.9	360
2600	12	24	Perimeter		230	290	Tar Springs	B	11.2	1,000
000	4	12	5-Spot		120	120	Fresh & Prod	F & B	5.1	520
1903	1	3		20	20	20	Prod	B	43.2	
3407	5	4	5-Spot	40	220	360	Penn. Sd	B	18.9	600
1904	4	7	Perimeter	10	102	180	Cypress	B	28.1	
3408	3	18	Perimeter	20	458	458	Penn. & Prod	F & B	68.8	1,150
307	12	25	Perimeter	10	396	396	Penn. & Prod	B	9.5	1,400
3409	9	12			350		Cypress & Prod	B		
1017	1	4	Mod. Line	20	90	90	Well	B	10.1	1,293
1020	3	8	Mod. Line	20	256	256	Well	B	29.9	1,385
308	1	2	Irregular		10	60	Cypress Sd	B		
327	5	24	Peripheral	10	305	305	Cypress	B	41.6	
3417	2	2	Line Dr.	10	160	160	Penn. Sd	B	6.2	
2601	45	47	5-Spot	10	527	527	Tar Springs	B	5.2	300
2602	15	12	Perimeter		445	445	Tar Springs	B	13.7	460
2603	6	2	Peripheral		61	61	Tar Springs	B	4.7	580
4250	4	5	Flank		128	128	Purchased†	F	3.9	1,500
4249	2	5	Irregular			100	Penn. Sd	B	7.3	
4251	10	17	5-Spot	10	130	130	Prod	B	2.9	1,050
4277	10	11	5-Spot	10	270	270	Penn. Sd & Prod	B	7.0	150
4252	1	2	5-Spot	20	53	120	Shallow Sd & Prod	F & B		
4253	2	5	5-Spot	10	25	70	Shallow Sd & Prod	F & B	9.8	1,580
4254	1	5			18	40	Prod	B	5.9	1,580
4255	6	12	5-Spot	10	82	180	Penn. & Prod	B	5.9	1,970
4256	1	5			50	135	Prod	B	13.5	580
4257	1	4			40	135	Prod	B	4.4	5,000
2900	2	4	Irregular	10	20	40	Penn. Sd	B		
4262	2	2	5-Spot	10	40			B		
1418							Penn.	B		300
4258	8	20	Flank		571	577	Penn.	B	63.3	280
4259	7	6	5-Spot	20	127	207	Penn.	B	16.7	950
1413	13	18	Flank	10	336	336	Prod & Water Supply	F & B	23.3	900
4260	37	31	5-Spot	16	590	1,360	Penn. Sd & Prod	B	9.1	650
4261	20	23	5-Spot	20	390	390	Cypress	B	6.9	580
318	3	9		40	160	160	Prod	B	24.0	
328	2	8			100	180	Prod	B	26.8	1,075
					150					
1100	5	11	Irregular		180		Cypress & Tar Springs	B	18.0	
319	3	10	Peripheral	10	186	186	Prod & Well	F & B	44.8	460
309	2	2	Irregular	10	10	40	Penn. Sd	B	15.7	530
1102	1	3			40	40	Penn. Sd	B	29.6	
310	1	1					Prod	B	6.0	1,100
1103	3	3	Perimeter	20	120	120	Cypress	B	15.3	
312	1	2	5-Spot	10	5	40	Prod	B	16.0	260
313	6	7	Mod. 5-Spot	20	70	130	Penn. & Prod	B	8.6	908
314	1	1		10	20	20	Prod	B	5.0	
311	12	22			202	350	Penn. Sd & Prod	B		
315	1*	2			40	40		B	6.2	

(Continued)

Reservoir statistics (average values)						Remarks	Map no.
Depth feet	Net pay thickness feet	Porosity per cent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
2,825	12.0	16.0	56	36.4	2.2 @ 92°F	*Includes 4284, 4285 and 4290.	4291
2,709	30.0			39.0		Previously subjected to gas injection.	4240
2,800	24.0					Previously subjected to gas injection. *Includes 4242 and 4243. †Cumulative figures adjusted by operator.	4241
1,850	16.0	18.5				*Included with 4241.	4242
2,900	20.0					Previously subjected to gas injection. *Included with 4241.	4243
2,800	18.0					*Adjusted by operator.	4244
2,050	18.0					*No data 1957-1959.	4283
						*Waterflood production for the Illinois portion of this project is unknown.	3949
2,445	10.0					*Includes primary production since 7-54.	4289
							4247
2,110	11.0	17.0				*Includes primary production since 7-54.	4248
2,439	8.0			36.0			4278
1,180	18.0			32.0			223
1,700	15.0	20.0	78	38.0	8.3 @ 69°F		2600
600	18.0			36.5		*Estimated in 1958.	000
2,941	14.0			37.8		*Adjusted to 1958 value.	1903
2,985	6.0	12.5	775	41.4	2.5	*Adjusted to 1958 value.	3407
2,900	8.0			35.0		*Dump flood.	1904
3,100	5.3			37.0		*Adjusted to 1958 value.	3408
2,600	14.2	15.6	54	37.0-38.0	6.4 @ 60°F	*Corrected to 1958 value.	307
3,100						Includes 3416.	3409
2,770	6.7	16.4	42	37.2	3.9 @ 95°F	*Included with 1020.	1017
2,850	8.7	17.1	181	37.2	3.9 @ 95°F	*Includes 1017.	1020
3,015				35.9		*Includes primary production since 9-57.	308
3,000	10.0	16.9	911†	38.2	3.0 @ 102°F	*Dump flood. †Estimated.	327
2,700	8.0	15.0	60				3417
1,410	27.0	19.0	110	39.0			2601
1,550	9.0	18.8	223	40.0	4.1	*Includes primary production since 1948.	2602
1,280	10.0	21.0	32	39.0	5.5 @ 60°F	*Includes primary production since 8-51.	2603
2,800	9.6	18.6	64	34.5	5.2 @ 85°F	*Formerly Bristol Petro. Co. †Includes primary production since 8-54. ‡Purchased from City of Grayville.	4250
2,700	10.0					*Injection shut down 6-56 thru 6-58. †Includes primary production since 1-54.	4249
1,550	29.0	17.6	86	30.0	20	*Includes primary production since 6-51.	4251
2,840	10.0	15.6	70				4277
1,830				32.8	11.0 @ 80°F	*Includes primary production since 5-51.	4252
2,000	15.0	19.0	100	37.0			4253
2,800	10.0	15.0	46	37.0		*No injection 8-54 to 9-56.	4254
2,800	11.0	15.0*	50*	35.0		*Estimated.	4255
2,900	15.0						
2,000	10.0						4256
2,300	7.0						4257
595				34.1		*Includes primary production since 8-59.	2900
2,920		16.2	61	32.0		*No data 1959. †Excluding 1959.	4262
2,175	13.0	19.5	292	30.0	9.2 @ 83°F	*Adjusted to 1958 value.	1418
2,530	11.6	18.8	259	38.5		*Adjusted to 1958 value.	4258
1,695	14.0	19.0	225	29.2	8.0 @ 32°F	Previously subjected to gas injection. *Adjusted by operator. †Includes primary production since 3-53.	4259
2,628	15.5	17.5	106	38.6			1413
2,500	25.0	17.6	152	38.7			4260
2,950	6.0	15.0	800				4261
2,300	7.0	20.0				*Includes primary production since 11-56.	318
2,600	7.0	19.0					328
2,850	8.0			37.0			
2,870	5.0					*Controlled dump flood. †Includes primary production since 7-54.	1100
2,640	15.4	19.0	70	39.0	3.9 @ 95°F		319
2,771	9.2	17.0*	50*	34.7		*Estimate.	309
2,530	7.0						1102
2,602	10.0					*Includes primary production since 10-57.	310
2,863	9.0					*Injection estimated, dump flood. †Includes primary production from 6-55 to 12-56.	1103
2,856	6.0					Pilot flood. *Adjusted by operator; includes only water from Goldsby-Wilson lease.	312
2,580	15.0	15.4	17.3	38.0		*Corrected, includes McBride injection wells only. †Since 1-55.	313
2,600	12.0	19.0	60	38.0		*Formerly Phillips Pet. †Since 6-59.	314
2,650	10.0	19.0	20	36.0		*Includes primary production since 3-55.	311
2,600				37.0	4.6 @ 100°F		315
2,620	15.0	16.4	16	36.0		*Injection ceased 4-59. †Adjusted to 1958 value. ‡Excluding 1959.	

TABLE 15.—

Map no.	General					
	Field C=Consolidated	Operator	County	Project U=Unit	Date first injection	Formation
316	Sailor Springs C	Shulman Bros.	Clay	Neff*	1-57	McClosky
329	Sailor Springs C	Skiles	Clay	N. Sailor Springs	11-56	Rosiclar
2218	St. Francisville E	J. E. Bauer	Lawrence	All States Life	11-57	Benoist
1222	St. James	H. Rosenthal*	Fayette	Washburn	3-54	Cypress
1905	Ste. Marie	J. R. Randolph	Jasper	Ste. Marie	10-48	McClosky
2612	Salem C	T. M. Conrey	Marion	Sebastian	11-59	Benoist
2604	Salem C	Texaco	Marion	Rosiclar Sand U	4-50	Rosiclar
2605	Salem C	Texaco	Marion	Salem U	10-50	Benoist
2606	Salem C	Texaco	Marion	Salem U	10-50	Devonian
2607	Salem C	Texaco	Marion	Salem U	4-51	McClosky
2608	Salem C	Texaco	Marion	Salem U	10-50	Renault & Aux Vases
1010	Samsville N	Ashland	Edwards	W. Salem*	9-54	Bethel
1306	Sesser C	W. I. Lewis	Franklin	Sesser U	8-58	Renault
410	Shattuc	T. M. Conrey	Clinton	Gullick	12-59	L. Cypress
1416	Shawneetown N	Sun	Gallatin	L. Miller	11-59	Aux Vases
700	Siggins	Bell Bros.	Cumberland	Flood 1	9-50	U. Siggins
702	Siggins	Forest	Cumberland	Siggins	6-42	Siggins
215	Siggins	General Operations	Clark & Cum- berland	Siggins U	12-51	Casey
216	Siggins	Pure	Clark & Cum- berland	Union Group	12-46	Siggins
317	Stanford S	Gulf	Clay	S. Stanford U	5-54	Aux Vases
3800	Stewardson	W. L. Belden	Shelby		9-59	Renault & Rosiclar
4263	Storms C	Sinclair	White	Storms Pool U	3-56	Waltersburg
3411	Stringtown	N. C. Davies*	Richland	Stringtown	12-53	McClosky
3413	Stringtown	Skelly*	Richland	Stringtown	12-53	McClosky
1302	Thompsonville E	Humble	Franklin	E. Thompsonville	7-54	Aux Vases
1303	Thompsonville N	Humble	Franklin	N. Thompsonville U	10-55	Aux Vases
1304	Thompsonville N	J. & W.	Franklin	N. Thompsonville U	1-56	Aux Vases
1305	Thompsonville N	J. & W.	Franklin	Thompsonville U	3-54	Aux Vases
2609	Tonti	Tamarack	Marion	Branch	12-53	McClosky & Benoist
4279	Trumbull C	E. Price	White		11-59	Aux Vases
2610	Wamac	L. H. Jonas*	Marion	Wamac	5-54	Petro
2611	Wamac	Wamac	Marion	Wamac U	7-57	Petro
1301	W. Frankfort C	Shell	Franklin	W. Frankfort U	11-57	Tar Springs
1308	W. Frankfort C	Shell	Franklin	Orient U	9-59	Tar Springs
1307	W. Frankfort C	Sohio	Franklin	Horn-Diamond "B"	7-59	Ohara and McClosky
1906	Willow Hill E.	Pure	Jasper	Willow Hill U	8-57	McClosky
703	York	Trans-Southern*	Cumberland	York	10 50	Casey
4137	Zenith N	Mobil	Wayne	Zenith N U	3-59	Rosiclar

## WATERFLOOD OPERATIONS

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(Continued)

Information	Production and injection statistics (thousand bbls)						Map no.
Sec.-Twp.-Range	Secondary recovery						
	Water injection		Oil production		Water production		
	Total 1959	Cumulative 12-31-59	Total 1959	Cumulative 12-31-59	Total 1959	Cumulative 12-31-59	
16-3N-7E	627	96	3.4	3		1*	316
{2-4N-7E}	334	386	6.3	32	67	222	329
{35-5N-7E}							
22-2N-11W	359	710	54.7	81	80	167	2218
30-6N-3E		460†		147‡		460†	1222
5, 6, 7, 8-5N-14W	67*	1,900*	9.3	191†	1	62‡	1905
21-1N-2E	1	1	0.2	0	1	1	2612
15-1N-2E	186	1,674	4.0	87	10	187*	2604
1, 2N-2E	39,291	227,015	3,978.8	21,528	17,730	92,594*	2605
1, 2N-2E	2,659	50,003	39.7	556	1,353	15,504*	2606
1, 2N-2E	20,724	96,789	1,366.6	5,767	7,660	30,446*	2607
1, 2N-2E	8,852	45,552	872.4	2,323	1,073	8,057*	2608
30-1N-14W	16‡	319‡	0.1	7‡			1010
17, 19, 20-5S-2E	185	242	16.8	19*	11‡	13‡	1306
28-2N-1W	0	0	0	0	1	1	410
7-9S-10E	8	8	0	0	0	0	1416
13-10N-10E	30	407*	14.0	152		193‡	700
{7, 11, 12-10N-11E}	3,464	53,125	523.5	9,083			702
{13, 14-10N-10E }							
{7-10N-14W}	234	2,250*†	30.2	209‡	205	617*†‡	215
{7-10N-11E}							
{13-10N-14W}	985	16,221	64.2	2,407	1,281	13,201	216
{18-10N-11E}							
2, 9, 16, 17-2N-7E	0*	2,805	2.7	370	40	986‡	317
27-10N-5E	23	23	0	0	0	0	3800
2, 11, 12, 13, 14, 15, 22, 23, 24-6S-9E	6,929	14,801	156.7	176*	1,850	3,036	4263
31-5N-14W		257‡		19†‡		289‡	3411
31-5N-14W		171*		40*		232*	3413
12-7S-4E	185	842	19.4	109*	120	453	1302
3, 9, 10-7S-4E	370	1,701	62.8	324*	118	397	1303
3, 9, 10-7S-4E	251	1,185	51.1	334	95	209	1304
10, 15-7S-4E	95	697*	29.2	53	7	50	1305
4-7N-2E	128*		0	88*	128*		2609
29-5S-9E	2	2			2	2	4279
30-1N-1E		32†		4‡			2610
19, 30-1N-1E	152	386	11.1	27	85	148	2611
18, 19-7S-3E	692	1,477	266.8	399	187	203	1301
12-7S-2E	24	24	2.1	2	22	22	1308
24, 25-7S-2E	74	74	6.1	6	7	7	1307
6-6N-11E	51	121	2.1	6	23	36	1906
6-9N-11E		611*		15*		240*	703
21-2N-6E	17	17	5.0	5	3	3	4137

TABLE 15.—

Map no.	Development as of 12-31-59						Injection water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source Sd=Sand Gr=Gravel Prod=Produced	Type F=Fresh B=Brine	Av. bbls per day per well per ft.	Max. well-head pressure reported PSI
	Inj.	Prod.			Sub-jected to inj.	Total				
316	1	1	Line 5-Spot	20	40	40	Tar Springs	B	46.4	1.175
329	3	8		100	120	Prod	B	50.9	0	
2218	6	9		160	160	Prod	B	6.1	1.495	
1222	3	9		95	95	Prod	B			
1905	1	8				500		B	26.2	
2612	1	1	5-Spot	10	10	10	Prod	B	1.3	
2604	3	3	Plank	10	100	100	Penn. & Prod	B	12.1	900
2605	244	227	Peripheral & 5-Spot	20	7,975	7,975	Gr & Prod	F & B	15.7	800
2606	24	7	Peripheral		5,414	5,414	Gr, Sd & Prod	F & B	16.0	
2607	141	138	Peripheral		7,712	7,712	Gr & Prod	F & B	20.1	800
2608	104	65	Peripheral		4,881	4,881	Gr & Prod	F & B	9.0	740
1010	1	1			20	35	Prod	B	54.0	
1306	5	6	Line & Peripheral		220	220	Lake	F	20.3	200
410	1	4	5-Spot	10	50	50	Prod	B	1.6	
1416	1	2			30	30	Penn. Sd	B	7.5	460
700	9	15	5-Spot	5.3	80	80	Prod	B	0.6	220
702	493	475	5-Spot		1,800		Gr & Prod	F & B*	0.6	200
215	28	27	5-Spot	2.5	118	260	Lake & Prod	F & B	0.4	250
216	102	93	5-Spot	3.7	468	468	Prod	B	0.9	245
317		2	5-Spot	20	125	170		B		
3800	1	14	5-Spot	5		120	Prod	B	6.5	500
4263	31	83	5-Spot	20	360	1,796	River & Prod	F & B	30.6	400
3411	2	3			80	80				
3413										
1302	3	3	5-Spot		30	117	Cypress	B	9.4	620
1303	5	3	5-Spot	20	80	164	Cypress	B	8.1	870
1304	7	7	5-Spot & Line	10	236	261	Prod & Lake	F & B	7.0	1,250
1305	5	3	Mod. Peripheral	10	176	185	Prod & Lake	F & B	3.3	1,500
2609	2	7		10	60	180	Prod	B		
4279	1	1						B	1.6	
2610										
2611	6	7	5-Spot	10	35	250	Purchased	F	3.5	550
1301	6	6	5-Spot	20	141	141	Cypress	B	10.2	575
1308	3	4	Peripheral		63	102	Cypress	B	5.6	933
1307	1	4	5-Spot	20	80	80	Purchased	F	29.1	
1906	1	3	Line Drive	70	70	100	Tar Springs & Prod	B	14.8	
703	3	7	Line Dr.	4.4	15	125	Prod	B		
4137	1	6	Irregular	20	20		Cypress	B		

(Continued)

Reservoir statistics (average values)						Remarks	Map no.
Depth feet	Net pay thickness feet	Porosity per cent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
3,000	5.0			36.0		*Estimated in 1958.	316
2,880	6.0						329
1,740	27.0	17.0	40	36.5	10.0 @ 60°F		2218
1,595	20.0			34.0		*No data 1959. †Estimate as of 1958. ‡Total oil production as of 1958.	1222
2,860	7.0					*Estimated; dump flood. †Excluding 1-56 to 12-56. ‡Since 1-56.	1905
1,927	8.0			35.0			2612
2,093	14.0	11.5	43	36.5		*Adjusted to 1958 value.	2604
1,770	28.0	17.9	150	37.0	3.9 @ 93°F	*Since 1-52.	2605
3,400	19.0	16.8	300	36.5		*Since 1-52.	2606
1,950	20.0	15.8	700	37.0		*Since 1-52.	2607
1,825	26.0	16.3	28	37.0	4.4 @ 93°F	*Since 1-52.	2608
2,930	5.0					*Lease sold to Nat'l. Supply 4-59. †Includes primary production from 9-54 to 12-56. ‡Controlled dump flood.	1010
2,690	4.7					*Corrected by operator. †Estimated.	1306
1,285	7.0			35.2			410
2,750	15.0						1416
320	16.0	18.9	73	35.0	12.0 @ 63°F	Previously subjected to gas injection. *1954-57 injection in joint operated wells not included. †As of 12-58.	700
400	32.0	17.5	56	36.6	8.0 @ 60°F	Previously subjected to gas injection. *Separate plants.	702
497	56.0	21.5	40	33.8	10.5 @ 63°F	Previously subjected to gas injection. *Estimated. †Corrected figure. ‡Excluding 1956.	215
404	25.0	18.5	45	36.0	8.8 @ 68°F		216
406	6.0	18.3	66				
2,975	11.8	19.8	97	38.8	3.7	*Injection ceased 12-58. †Corrected to 1958 value.	317
1,950	20.0					*Adjusted to 1958 value.	3800
2,250	20.0	20.9	870	33.0		*No data 1959. †Excluding 1959. ‡Includes primary production since 12-53.	4263
3,000	10.0	18.0				*No data 1958-1959.	3411
3,200	18.0	21.1	98	38.0		*Adjusted to 1958 value.	3413
3,075	25.0	22.0	170	37.5		*Adjusted to 1958 value.	1302
3,060	14.0	21.0	115	39.0	3.2 @ 90°F		1303
3,120	16.0	19.5	50	38.6	3.5 @ 90°F	*No injection 7-56 to 1-58.	1304
1,940						*Estimated.	1305
3,143	25.0	24.0	54				2609
							4279
						*No data 1958-59; formerly owned by Stinson. †As of 1-56. ‡As of 12-57; estimated.	2610
750	20.0	20.3	183	30.0	19.9 @ 68°F	Previously subjected to gas injection.	2611
2,050	31.3	17.1	155	37.4			1301
2,050	12.1			38.5			1308
2,800	14.0	15.0	100	40.2			1307
2,634	9.5						1906
590	10.0	21.9	231	30.3	10.0 @ 75°F	*No data 1959.	703
3,100							4137

TABLE 16.—ILLINOIS PRESSURE MAINTENANCE PROJECTS

Map no.	General					
	Field C=Consolidated	Operator	County	Project U=Unit	Date first injection	Formation
1011	Albion C	Calvert	Edwards	S. Albion	4-51	Bieh1
001	Beaver Creek	Conrey & Conrey	Bond	L. Bieh1	1953	Benoist
405	Beaver Creek S	Conrey & Conrey	Clinton	Wrone	4-56	Benoist
1013	Bone Gap C	V. R. Gallagher	Edwards	Kneier Ragland	6-52	Waltersburg
407	Carlyle N	Conrey & Conrey	Clinton	Bone Gap U	1955	Benoist
4264	Enfield	Ryan	White	Kreitemeyer	1-55	Aux Vases
406	Germantown E	Natl. Assoc. Pet.	Clinton	S. Enfield U 1	9-56	Devonian
1223	Louden	Humble	Fayette	Germantown	9-43	Devonian
4265	Maunie S C	Natl. Assoc. Pet.	White	Louden Devonian	6-57	Tar Springs
3958	Mt. Carmel	T. W. George*	Wabash	S. Clear Pond	10-57	Cypress
3959	New Harmony C	Humble	Gallatin	Dunkel-Johnson	12-58	Cypress
1414	Omaha	T. W. George*	Gallatin	Omaha	10-44	Palestine
4266	Phillipstown C	Natl. Assoc. Pet.	White	Keensburg U	6-56	Benoist
2006	Salem C	Humble	Jefferson	Stokes "B" 3*	1-48	Bethel
				Dix (R. & P. M.)		

TABLE 16.—

Map no.	Development as of 12-31-59						Injection water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acres		Source Sd=Sand Gr=Gravel Prod=Produced	Type F=Fresh B=Brine	Av. bbls. per day per well per ft.	Max. well- head pressure reported PSI
					Sub- jected to inj.	Total				
1011	2	7	Perimeter	10		120	Prod	B	33.6	
001	1	4	5-Spot	10	40	50	Prod	B	11.3	1,050
405	1	5	5-Spot	10	50	50	Prod	B	10.3	650
1013	1	9			40	120	Prod	B	8.5	450
407	1	2		10	20	20	Prod	B		
4264	3	5			314	314	Prod	B	27.8	1,160
406	1	14	Peripheral	20	20	300	Prod	B	13.4	350
1223	7	45	Peripheral		2,600	2,600	Prod	B	216.1	182
4265	3	6	Line	10	40	60	Prod	B	1.0	900
3958	4	5	5-Spot		160		Well & Prod	F & B		
3959	8	14			280	280	Well	F		
1414	1	16	Flank		280	280	Prod	B	27.7	300
4266	2	4		10	30	70	Prod	B	6.5	1,200
2006	4	63	Peripheral		1,200	1,200	Penn. & Tar Springs	B	52.3	400

# PRESSURE MAINTENANCE PROJECTS

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## USING WATER INJECTION DURING 1959

Information	Production and injection statistics (thousand bbls)						Map no.
Sec.-Twp.-Range	Secondary recovery						
	Water injection		Oil production		Water production		
	Total 1959	Cumulative 12-31-59	Total 1959	Cumulative 12-31-59	Total 1959	Cumulative 12-31-59	
{35, 36-2S-10E}	221	1,491	15.9	625*	339	1,383	1011
{1-3S-10E}							
36-4N-3W	33	80	3.1	19			001
12-3N-3W	30	77	6.9	23			405
18-1S-14W	62	878	21.7	361	62	878	1013
23-3N-3W	26*	62*	3.6	12			407
28, 29, 32-5S-8E	234	839	62.3	277	226	700	4264
{1-1N-4W}	293	1,522	99.1	289	373*	1,602*	406
{36-2N-4W}							
8N-3E	9,937	153,094	378.4	17,396	6,928	136,699	1223
12-6S-10E	13	51	10.9	25	13	51	4265
32-1N-12W		186†		1†		1†	3958
9-2S-13W							3959
{33-7S-8E}	172	1,956	62.3	2,647	138	1,710	1414
{4-8S-8E}							
26-4S-10E	19†	214†	3.8†	15†	29†	307†	4266
3, 4, 9, 10, 15, 16-1S-2E	917	7,323	441.6	9,266	630	5,292	2006

(Continued)

Reservoir statistics (average values)						Remarks	Map no.
Depth feet	Net pay thick- ness feet	Poros- ity per cent	Perme- ability milli- darcys	Oil gravity API	Oil viscosity centipoises		
2,080	9.2	16.8	384	32.3	10.4 @ 85°F	*Includes primary production since 4-51.	1011
1,140	8.0			32.4			001
1,110	8.0			36.0			405
2,310	20.0	18.0	120	34.6	5.6 @ 80°F		1013
3,260	8.4	21.5	142	36.8	35.2 @ 60°F	*Estimated.	407
2,300	60.0				3.5 @ 101°F		4264
3,100	18.0	14.4	41	29.0	3.5 @ 101°F	*Estimated.	406
2,200	12.0				6.5 @ 96°F		1223
						*No data 1959. †Excluding 1959.	4265
							3958
1,700	17.0	18.9	427	27.0	17.0 @ 76°F	*No data 1959.	3959
2,558	8.0			38.0			1414
1,950	12.0	16.4	128	39.0	2.5 @ 87°F	*Incorporated with 4277 as of 6-59. †As of 6-59.	4266
							2006

TABLE 17.—ILLINOIS WATERFLOOD

Map no.	General					
	Field C = Consolidated	Operator	County	Date first injection	Project U = Unit	Date abandoned
4201	Albion C	Concho	White	10-52	N. Crossville U	1959
4202	Albion C	Concho	White	10-52	N. Crossville U	1959
1014	Albion C	Continental	Edwards	5-43	Stafford	12-56
1015	Albion C	First Nat. Pet. Trust	Edwards	4-52	Brown	12-55
3944	Allendale	Indiana Farm Bur.	Wabash	11-53	Woods	6-57
3904	Allendale	Tamarack	Wabash	54	Patton	1959
4129	Barnhill	Wayne Development	Wayne	12-50	Walter	1-55
3942	Berryville C	Phillips	Wabash	9-52	Tarply	2-53
3943	Berryville C	Phillips	Wabash	2-52	Townsend	7-53
217	Casey	Calvan American	Clark	8-53	Shawver	7-54
4267	Centerville E	Lesh	White	6-54	Centerville E	12-55
4246	Centerville E	Sun	White	10-50	E. Centerville	8-57
408	Centralia	Sohio	Clinton	11-51	Copple Town	*
4130	Clay City C	Gulf	Wayne	8-55	Winona	10-56
301	Clay City C	Phillips	Clay	7-53	Minnie	5-58
4132	Clay City C	Texaco	Wayne	1-58	E. Gallagher	7-59
4205	Concord C	B. Kidd	White	1-55	Kerwin-Concord*	11-58
4228	Concord C	Great Lakes Carbon	White	6-53	McClosky	12-56
4229	Concord C	Phillips	White	8-53	Dallas	1-57
4120	Covington S	General American	Wayne	11-57	Heidinger-Vogel	10-59
1501	Dale C	C. Pearson	Hamilton	2-52	N. Rural Hill U	1958
3945	Friendsville N	Mobil	Wabash	7-47	J. L. Litherland	9-57
4124	Goldengate C	Cities Service	Wayne	8-56	Kletzker U	9-58
4128	Goldengate C	Cities Service	Wayne	10-53	Goldengate	8-57
1404	Inman W C	Phillips	Gallatin	5-57	Lever	7-56
2200	Lawrence	Calvan American	Lawrence	12-53	Pier	9-56
2229	Lawrence	Calvan American	Lawrence	3-53	Waller	11-55
2205	Lawrence	W. Duncan	Lawrence	8-56	L. C. David	9-58
2230	Lawrence	Ree	Lawrence	10-52	Snyder	1955
2500	Livingston	W. H. Krohn	Madison	7-54		1958
667	Main C	H. J. Adams	Crawford		H. J. Adams*	1958
613	Main C	General Operations	Crawford	2-53	Culver	12-58
614	Main C	General Operations	Crawford	10-52	Littlejohn	1958
660	Main C	General Operations	Crawford	5-57	Culver Pilot	12-58
662	Main C	Petroleum Products Co.	Crawford	9-51		12-56
663	Main C	Ree	Crawford	11-53	Meserve	5-55
627	Main C	Shakespeare	Crawford	7-54	McIntosh U	1-59
628	Main C	Shakespeare	Crawford	5-54	Montgomery U	5-58
661	Main C	Skiles	Crawford	7-51	Correll-Curley	9-55
664	Main C	Skiles	Crawford	12-51	Walter-Community	12-52
665	Main C	Skiles	Crawford	11-57	Weger	7-56
679	Main C	Wausau	Crawford		Highsmith	1957
2003	Markham City	Tidewater	Jefferson	8-55	Newton Investment	1958
2007	Markham City	Tidewater	Jefferson	8-55	Newton Investment	1957
218	Martinsville	J. B. Buchman	Clark	10-52		1954
219	Martinsville	Mobil	Clark	1-51	Carper	2-55
220	Martinsville	Mobil	Clark	8-50	Casey	2-53
4230	Maunie S C	Mobil	White	8-47	Tar Springs U	12-57
4239	Maunie S C	Mobil	White	11-55	Maunie Coop.	
4268	Maunie S C	Mobil	White	11-49	Tar Springs U 2	1955
3941	Mt. Carmel	First Nat. Pet. Trust	Wabash	4-53	Shaw Courter	12-56
3946	Mt. Carmel	First Nat. Pet. Trust	Wabash	2-50	Shaw Courter	12-56
3917	Mt. Carmel	Tamarack	Wabash	6-52	G. Dunkel	1958
4222	New Harmony C	Skiles	White	5-55	Smith-Davenport	10-57
4217	New Harmony C	J. Simpkins	White	9-56	*	
4223	New Harmony C	Sun	White	8-47	Greathouse	1-57
4234	New Harmony C	Sun	White	3-53	Ford "B"*	6-58
4269	New Harmony C	Sun	White	3-48	Ford "A"	7-52
3415	Parkersburg C	Calvert	Richland	1-55	Parkersburg	1956
4245	Phillipstown C	C. E. Brehm	White	6-52	Phillipstown U "A"	5-57
4232	Phillipstown C	Skiles	White	11-55	L. O. Cleveland <sup>d</sup>	12-56
4270	Phillipstown C	Sun	White	1-53	Phillipstown	3-54
1010	Samsville	Ashland	Edwards	9-54	W. Salem	3-59
3410	Seminary	R. P. Johnson	Richland	2-54	Seminary	1958
701	Siggins	C. R. Cochonour	Cumberland	1-50	Vevay Park	1956
003	Sorento C	J. Simpkins	Bond			1958
4271	Storms C	Mabee	White	7-51	Storms	6-53
3412	Stringtown	Helmerich & Payne	Richland	10-54	Stringtown	1958
3414	Stringtown	Murvin & Steber	Richland			10-58
222	Westfield	Forest	Clark	6-50	Parker	12-56
502	Westfield	General Operations	Coles & Clark	6-51	Johnson	1958
221	Westfield	Ree	Clark	8-51	Hawkins	1954
1907	Willow Hill E	M. M. Spickler	Jasper	6-52		12-56
002	Woburn C	Arrow	Bond	9-51	Spindler	1958

PROJECTS REPORTED ABANDONED

Information		Production and injection statistics (M bbls)			Map no.
Formation	Sec.-Twp.-Range	Cumulative water injection	Cumulative secondary oil produced	Cumulative water produced	
Cypress	26, 27, 34, 35-3S-10E	3,620	313	1,270	4201
Tar Springs	26, 27, 34, 35-3S-10E	868	58	69	4202
McClosky	13-2S-10E	625	43*	637	1014
Aux Vases	6-2S-11E	*			1015
Biehl	20-1N-12W	633	45†	559*	3944
Cypress	28-1N-12W	644*	90*	147*	3904
McClosky	26-2S-8E	144		119	4129
McClosky	2-1N-14W	35	0	103	3942
McClosky	35-2N-14W	50	0	86	3943
Casey	23, 24-10N-14W	49	2		217
Rosiclare	12-4S-9E	*	4	4†	4267
Tar Springs	7-4S-10E	269	39	132	4246
Trenton	35-2N-1W	236	34	21	408
McClosky	12-1S-8E	25	0	0	4130
Rosiclare	24-3N-7E	181	79	460	301
McClosky	2-2S-7E	32	0	0	4132
McClosky	21-6S-10E	342	12	77	4205
Rosiclare & McClosky	28-6S-10E	243*	5*	44	4228
Rosiclare & McClosky	28-6S-10E	247	3	42	4229
McClosky	13-2S-6E	51	0	0	4120
Aux Vases	5, 6, 7, 8-6S-6E	3,372	293*	1,536*	1501
Biehl	1, 12-1N-13W	623	142*	282	3945
Aux Vases	4-3S-9E	102	1	10	4124
McClosky	28, 32, 33-S2-9E	926	7*	281	4128
Cypress	3-8S-9E	8	0		1404
Cypress	2, 11-4N-13W	146*	6†		2200
Cypress	5, 6-2N-11W	828*	12		2229
Paint Creek	8-3N-11W	56	0	8	2205
Cypress	30-3N-11W	16*	1*	69*	2230
Penn.	17-6N-6W	77	3		2500
Robinson	28-8N-12W	1,058			667
Robinson	5, 6, 7-7N-12W	1,408*†	4*	124*	613
Robinson	20-6N-12W	442*	28	153	614
Robinson	6-7N-12W	296	7	34*	660
Robinson	29, 32-8N-12W	445			662
Robinson	11-6N-13W	251	1	39	663
Robinson	17, 18, 19, 20-6N-12W	396	18	241*	627
Robinson	32, 33-6N-12W	516	18	177	628
Robinson	4-5N-12W				
Robinson	10-7N-12W	1,207	30	227	661
Robinson	1-6N-13W	26	0	29	664
Robinson	36-7N-13W				
Robinson	18, 19-5N-11W	777	9	109	665
Robinson	13, 24-5N-12W				
Robinson	31-6N-12W				679
McClosky	1-3S-4E	*	2†	7**	2003
McClosky	1-3S-4E	*	1†		2207
Carper	31-10N-13W	283*	0	5*	218
Carper	30-10N-13W	1,111	10	10	219
Casey	19-10N-13W	872	2	34	220
Tar Springs	19, 24, 25-6S-10 & 11E	4,748†	792*	2,049	4230
Tar Springs	24-6S-10E	180	11	141	4239
Tar Springs	24-6S-10E	639	60	209	4268
Tar Springs	19-6S-11E				
Cypress	7-1S-12W	259	28	10*	3941
Biehl	7-1S-12W	364	69	148*	3946
Biehl	5-1S-12W	198*	28*†	32*	3917
Cypress	15-4S-14W	147	4	2	4222
McClosky	32, 33-3S-14W				
McClosky	5-4S-14W	762			4217
McClosky	33-4S-14W	1,088	129	227	4223
McClosky	4-5S-14W				
Bethel	21-4S-14W	495	50	199	4234
McClosky	18-5S-14W	58	13	1	4269
McClosky	16, 21-2N-14W	107*	0	43*	3415
Penn.	30-4S-11E	311	68*		4245
Penn.	19, 30-4S-14W				
Tar Springs	36-4S-10E	48	0	0	4232
Tar Springs	6-5S-11E	58	0	251	4270
Bethel	30-1N-14W	319	7		1010
McClosky	17-2N-10E	89*	25	290†	3410
Siggins	25-10N-14W	225	2	103	701
Devonian	17-6N-4W				003
Waltersburg	22-6S-9E	90	0		4271
McClosky	31-5N-14W	171	5	57	3412
Aux Vases	31-5N-14W				3414
"Gas Sand"	30-11N-14W	663	34		222
"Gas Sand"	7, 18, 19, -11N-11E	205	13	75*	502
"Gas Sand"	18-11N-14W				
McClosky	20, 21-11N-14W	265*	2*	44*	221
McClosky	36-7N-10E	*	2†		1907
Benoist	10-6N-2W	194*	11*†	194*†	002

TABLE 17. —

Map no.	Maximum development during operation						Injection water	
	No. wells		Injection pattern	Spacing	Productive acreage		Source Sd = Sand Gr = Gravel Prod = Produced	Type F = Fresh B = Brine
	Inj.	Prod.			Subj. injection	Total		
4201	8	21	Perimeter	10	250	300	River & Prod	F & B
4202	4	5	5-Spot	10	100	100	River & Prod	F & B
1014	1	1			80	80	Prod	B
1015	1	1	Spot	10	30	20	Hardinsburg	B
3944	5	7		10	147	147	Prod	B
3904	4	7	5-Spot	25	130	130	River & Prod	F & B
4129	1	2		10	40	40	Cypress	B
3942	1	2			14	30	Prod & Tar Springs	B
3943	1	2			27	30	Prod & Tar Springs	B
217	9	4	5-Spot	4.4	13	215	Shallow Sd	F
4267	1	1			20	20	Tar Springs	B
4246	1	5	Flank		80		Tar Springs & Prod	B
408	2	12		20	160	200	Devonian	B
4130	1	1		12.5	13	50	Tar Springs	B
301	1	1			20	20	Prod	B
4132	1	1		40	40	80	Cypress & Prod	B
4205	1	3		10	30	40	Shallow Sd	F
4228	3	8	Mod. Peripheral		140	150	Gr Beds	F
4229	1	3			40	60	Shallow Sd & Prod	F & B
4120	1	1		40	80	80	Cypress	B
1501	11	16	5-Spot	20	310	325	Cypress	B
3945	2	3	5-Spot	10	13	40	Shallow Sd	F
4124	1	2	Irregular	10	10	30	Cypress Sd	B
4128	2	8	Irregular		159	210	Gr Beds	F
1404	1	1		10	10	20	Prod	B
2200	4	8	5-Spot	10	13	144	Shallow Sd	B
2229	8	8	5-Spot	10	35	625	Gr Beds	B
2205	1	1			20	10	River Gr	F
2230	1	2			10	230	Tar Springs	B
2500	2	5				80	Benoist & Aux Vases	B
667	5	4		10	160		Lake & Prod	F & B
613	12	8	5-Spot	10	45	640	Lake & Prod	F & B
614	4	9	Irregular	4.5	35	120	Creek & Prod	F & B
660	6	5	5-Spot		35	240	Lake	F
662	4	2	5-Spot	10	10	700	Shallow Sd & Prod	F
663	4	4	5-Spot	10		525	Penn. Sd	B
627	4	8	Peripheral	4.7	39	88	Penn. Sd	B
628	6	6	Mod. 5-Spot	6-10	52	85	L. Robinson Sd	F & B
661	18	17	5-Spot	10	180		Creek & Penn. Sd	F & B
664	5	6	5-Spot	10	40		U. Penn. Sd	B
665	9	11	5-Spot	10	90	110	Creek & Prod	F & B
679								
2003	1	1		40	40	40	Cypress	B
2007	1	1	Dump		40	40	Cypress	B
218	2	6	5-Spot	20	40	40	Shallow Sd	F
219	4	1	5-Spot	10	10	50	Gr Bed	F
220	8	3	5-Spot	10	23	110	Gr Bed	F
4230	2	4	5-Spot	20	138	230	Gr & Prod	F & B
4239	1	3	Irregular		18	80	Gr & Prod	F & B
4268	3	2	5-Spot	20	50	50	Gr Bed	F & B
3941	1	4	Spot	10	50	50	Water Well	F
3946	1†	2	Spot	10	30	30	Water Well & Prod	F & B
3917	2	3		28.9	87	68	Shallow Sd	F
4222	1	2	Irregular		30	30	Tar Springs	B
4217	4		5-Spot	20	85	302	River & Gr Bed	F
4223	1	1			50		Gr Bed	F
4234	1	5			20	80	Gr Bed	F
4269	1	1	Spot		40	40	Gr Bed	F
3415	2	7		20	160	160	McClosky	B
4245	1	5	Irregular		90	90	Penn. Sd	B
4232	1	2	Irregular		30	30		B
4270	1*	9			10	10	Prod	B
1010	1	1			20	35	Prod	B
3410	2	4			173	173	Cypress	B
701	2	4	5-Spot	4.4	10		Surface & Prod	F & B
003								
4271	1	2			40	40	Penn. Sd	B
3412	2	2		10	92	50	Cypress & Prod	B
3414								
222	9	12	5-Spot	2.5	20		Gr Bed	F
502	30	14	5-Spot	4.4	50	640	Lake & Prod	F & B
221	15	8	5-Spot	4.4	40	360	Devonian & Prod	F & B
1907	1	1			20	20	Prod	B
002	1	4			20	20	Prod	B

(Continued)

Reservoir statistics (average values)						Remarks	Map no.
Depth feet	Net pay thickness feet	Porosity per cent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
2,850	12.0	18.0		37.0			4201
2,460	6.0	18.0		37.0			4202
3,222	4.0	16.3	898	39.0		*Includes primary production to 12-56.	1014
3,005	21.0					*Dump flood.	1015
1,520	15.0			28.4	8.9 @ 32°F	*1-55 to 7-57. †Includes primary production to 12-56.	3944
2,000	16.0			34.8		*Estimated.	3904
3,450	18.0						4129
2,890	10.0						3942
2,890	10.0						3943
450	21.5	22.4	108	31.8	13.6 @ 65°F		217
3,366	7.0			43.0		*Dump flood. †Fróm 1-55 to 12-55.	4267
2,530	6.0			36.6			4246
3,950	22.0	10.0		39.8	2.7	*Pilot flood, reported as abandoned in 3-53.	408
3,115	8.0	12.0		40.1			4130
2,990	30.0	14.0	2,000	39.0			301
3,255	6.0			38.0			4132
3,003	16.0					*Dump flood.	4205
2,980	22.0			37.5		*As of 1-55.	4228
2,960	30.0	15.0	50	36.0			4229
3,316	4.0						4120
3,125	14.7	23.9		39.0	2.3	*Since 1-53.	1501
1,620				35.6		*Includes primary production to 12-56.	3945
3,242	10.0	15.0	10	37.0			4124
3,308	8.0			34.0		*Corrected figure.	4128
2,560	6.0	18.0*	100*	35.0		*Estimated.	1404
1,520	25.0	20.8	33	38.6	3.5 @ 86°F	*As of 5-56. †As of 8-56.	2200
1,535	50.0	18.5	70	39.5	5.0 @ 85°F		2229
1,600	6.0						2205
1,580	25.0	21.2	125	38.6	4.1 @ 85°F	*As of 1-55.	2230
520	15.0			33.5		*Temporarily abandoned 10-54 to 5-55.	2500
1,000	22.0	18.5	98			*No data 1958-1959.	667
950	25.0	22.7	101	35.5	10.0 @ 78°F	*Data for 7-55 to 11-55 not included. †Estimated.	613
850	24.0	20.0	50	37.5	10.0 @ 78°F	Previously subjected to gas injection. *Since 1-56.	614
945	14.0	20.8	154	35.5	10.0 @ 78°F	*Estimated.	660
1,000	15.0	20.0	75	37.5	7.3 @ 76°F	*As of 1-55.	662
950	22.7	21.9	89		10.0 @ 79°F		663
900	12.0			32.6	11.0 @ 75°F	Previously subjected to gas injection. *Estimated.	627
915	26.0	22.6	150	28.3	23.0 @ 71°F		628
1,035	20.0	22.2	100	33.0	13.5		661
950	10.0	20.1	93	36.0	12.5 @ Reservoir temperature		664
1,010	15.0						665
900	20.0	17.0	37				
3,080	6.0					*Dump flood. **As of 1-57. †Estimated; includes primary production since 1-56.	679
3,080	6.0					*Dump flood. †Total production since 1-56.	2003
1,346	40.0	16.0	11	30.0		*As of 1-54.	2007
1,334							218
464							219
2,270				37.3	4.6 @ 89°F	*Includes primary production to 12-56. †Corrected figure.	220
2,275							4230
2,275							4239
							4268
2,050	12.0					*As of 1-56.	3941
1,375	16.0			40.2	4.7 @ 70°F	*As of 1-56. †During 1956, injection well used as a straight disposal well.	
1,500	6.7	15.3	310	36.6	3.9 @ 104°F	*Excluding 1957-1958. †Includes primary production since 6-52.	3946
2,630	10.0	17.7	145				3917
2,900	9.4			34.5	4.2 @ 98°F	*Arrow-McBride-Hon-Bump-Crawford	4222
2,900	5.0			36.9			4217
2,696	12.0	13.0†	30†	32.5		*Cooperative flood with Calstar. †Estimated.	4223
2,900	7.0			38.0			4234
3,062	10.0					*As of 1-56.	4269
1,912	23.0	13.0	36	38.0	4.5 @ 84°F	*Includes primary production to 12-56.	3415
							4245
2,300	12.0						4232
2,248	10.0			34.5		*Abandoned after unsuccessful input well fracture treatment.	4270
2,930	5.0			36.0		*Includes primary production since 9-54.	1010
3,000	8.0			30.1		*Estimated; dump flood. †Excluding 4-57 to 12-57.	3410
600	16.0	20.3	349				701
							003
2,241	15.0			38.0			4271
3,026	7.0						3412
270	25.0	17.9	153	28.1	54.0 @ 60°F	Previously subjected to gas injection.	3414
							222
320	35.0	21.5	86	29.0		*Excludes 1956.	502
290	30.0	22.0	120	30.0	28.0 @ 62°F	*As of 1-54.	221
2,615	10.0					*Dump flood, not in operation during 1956. †As of 1-55.	1907
1,006	14.0					*No data after 1955. †Estimated.	002

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